HITACHI

MODEL V-1100/V-1070
OSCILLOSCOPE

SERVICE MANUAL

Hitachi Denshi, Ltd.

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N O T I C E

This Service Manual describes the most typical product of this model. If there are any specific differences between this Manual and the servicing unit, please contact Hitachi Denshi sales office in your area.

MODEL V-1100/V-1070
OSCILLOSCOPE
Service Manual

1. SPECIFICATIONS

o CRT

Configuration and useful screen	6-inch rectangular screen with internal graticule; 8 x 10 div (1 div = 1 cm), marking for measurement of rise time
Accelerating potential	Approx. 18 kV
External intensity modulation	DC to 3.5 MHz, maximum input voltage 20 V (DC + peak AC)
Trace rotation	Present
Scale illumination	Variable

o VERTICAL DEFLECTION

Sensitivity	<CH1 and CH2> 5 mV/DIV to 5 V/DIV in 10 calibrated steps ±2 % (at +10 °C to 35 °C), x5; 1 mV/DIV, 2 mV/DIV ±4 %, continuous variable control between steps at least 1 : 2.5 (with UNCAL displayed) <CH3 and CH4> 0.1 V/DIV, 0.5 V/DIV ±2 % (at +10 °C to 35 °C)
Bandwidth	<CH1 and CH2> DC to 100 MHz (-3 dB) reference 8 division DC to 15 MHz (-3 dB) reference 8 division at x 5 magnification <CH3 and CH4> DC to 100 MHz (-3 dB), reference 8 division

Rise time	3.5 ns, 24 ns at x 5 magnification
Delay line	Permits viewing leading edge of displayed waveform
Input coupling	⟨CH1 and CH2⟩ AC-GND-DC ⟨CH3 and CH4⟩ AC-DC
Input impedance	Direct: 1 MΩ approx. 28 pF using probe: 10 MΩ, approx. 12 pF
Maximum input voltage	400 V (DC + peak AC at 1 kHz)
Display modes	CH1, CH2 (normal or invert), ALT CHOP (approx. 250 kHz), ADD, QUAD
Quad mode	Permits positioning independently
Polarity switching	+ or - (CH2 only).
X - Y operation	CH1: X axis, CH2: Y axis, Sensitivity: 5 mV/DIV to 5 V/DIV (1 mV/DIV at x5 magnification bandwidth: DC to 2 MHz (-3 dB), phase error: 3 ° or less from DC to 1 MHz
Dynamic range	8 div or more
Common-mode rejection ratio	At least 20 dB at 20 MHz

o HORIZONTAL DEFLECTION

Time base A	20 ns/DIV to 0.5 s/DIV in 23 calibrated steps, 1-2-5 sequence. x 10 magnifier fastest sweep rate 2 ns/DIV. Uncalibrated continuous control between steps 1: 2.5.
Time base B	20 ns/DIV to 50 ms/DIV in 20 calibrated steps, 1-2-5 sequence. x 10 magnifier fastest sweep rate to 2 ns/div.
Accuracy	±2 % or less (at +10 °C to 35 °C). Additional error for magnifier ±2 %
Display modes	A only, Alternate, A intensified by B, B delayed
Delay time jitter	Better than 1:20,000

o TRIGGER A AND B

A trigger modes — Automatic, Normal (For signals below 30 Hz), Single sweep, TV-V, TV-H

A trigger source — CH1, CH2, CH3, CH4, LINE, ALT (CH1, CH2)

A trigger sensitivity

	DC to 20MHz	20MHz to 100MHz
CH1 and CH2	0.3 div	1.5 div
CH3 and CH4	0.5 div	1.5 div

A trigger coupling — AC, HF Rej, LF Rej, DC

A trigger slope — + or -

A trigger variable holdoff — Adjustable control permits a stable triggering of repetitive complex waveform

B trigger modes — Automatic, Normal

B trigger source — CH1, CH2, CH3, CH4

B trigger couple — AC, DC

B trigger slope — + or -

TV trigger — (-) sync pulse more than 1 div

o READOUT FUNCTION

Panel setting displays — Vertical axis: V/DIV (CH1, CH2 only), INVERT, ADD, BW LIMIT 20 MHz, UNCAL, MAG (converted value), Input Coupling

Horizontal axis: s/DIV, UNCAL, MAG (converted value)

Others: Delay time, Trigger source

Cursor readout functions (V-1100 only)

V: $\triangle$-GND

$\triangle$V: $\triangle$-REF

$\triangle V\ \% : \frac{\triangle\text{-REF}}{5\ \text{div}} \times 100\ [\%]$

$\triangle T$: $\triangle$-REF

1/ T: $\triangle$-REF

$T\ \% : \frac{\triangle\text{-REF}}{5\ \text{div}} \times 100\ [\%]$

Phase: Degree (5 div=360°)

GND REF function (V-1100 only)		Displays GND REFerence cursors of CH1 and CH2 (CH1 only)
Digital measurement Functions (V-1100 only)	DVM DC Voltage:	Corresponds to the screen
	AC Voltage:	50 Hz to 10 MHz
	Frequency Counter:	0.12 kHz to 50 MHz more than 1 div, 50 MHz to 99.9 MHz more than 2 div

- o CALIBRATOR: 0.5 V ±1 %, 1 kHz ±0.1 % square wave
- o OUTPUT SIGNALS
  - Gate signal output: TTL positive gate pulse from A and B
  - CH1 output: Approx. 25 mV/DIV terminated into 50 ohm
    V-1100: DC to 100 MHz (-3 dB)
    V-1070: DC to 50 MHz (-3 dB)
- o POWER SUPPLY
  - Voltage: 100/120/220/240 V ±10 %
    48 Hz to 440 Hz
  - Power consumption: Approx. 65 W
- o OUTPUT DIMENSIONS: 330(W) x 160(H) x 410(D)mm
- o WEIGHT: Approx. 10 kg
- o ENVIRONMENT

Temperature	Specification	+10 °C to 35 °C
	Operating	-10 °C to 50 °C
	Storage	-20 °C to 70 °C
Humidity	Operating	45 % to 85 %
	Storage	35 % to 85 %

2. ACCESSORIES

The V-1100/1070 Oscilloscope is shipped with the following standard accessories:

2	Probes (AT-10AL1.5)
1	AC Power Cord
1	Operation Manual
1	Fuse (2 A for 120 V AC Power Source, or 1 A for 220 V AC and 240 V AC Power Source)
1	Dust Proof Cover

3. PREVENTIVE MAINTENANCE

Preventive maintenance, when performed on a regular basis, can prevent instrument breakdown and may improve the reliability of the oscilloscope. The severity of environment to which this instrument is subjected will determine the frequency of maintenance. A convenient time to perform preventive maintenance is preceding recalibration of the instrument.

Disassembly

Remove the top cover and the bottom cover of the instrument.
Most of the internal parts of the instrument are now accessible.
If access to the front of the circuit boards are necessary, remove the knobs from the external control shafts on the board.

Cleaning

The instrument should be cleaned as often as operating conditions require. Accumulation of dirt in the instrument can cause component breakdown.

The covers provide protection against dust in the interior of the instrument. Loose dust accumulated on these covers can be removed with a soft cloth or small brush.

Dirt that remains can be removed with a soft cloth dampened in a mild detergent and water solution. Abrasive cleaners should not be used.

Cleaning the interior should only be occasionally necessary. The best way to clean the interior is to blow off the dust with a dray, low-velocity stream of air. A soft-bristle brush or a cotton-tipped applicator is useful for cleaning in narrow spaces or for cleaning more delicate components.

Visual Inspection

The instrument should be inspected occasionally for such defects as broken connections, improperly seated transistors, damaged circuit boards, and heat-damaged parts. The corrective procedure for most visible defects is apparent; however, particular care must be taken if heat-damaged components are found. Overheating usually indicates other trouble in the instrument; therefore, correcting the cause of the overheating is important to prevent recurrance of the damage.

4. CALIBRATION

Hitachi Denshi, Ltd. provides complete instrument repair and recalibration at our oversea's office, and authorized dealer. Contact your local Hitachi Denshi, Ltd, office or representative.

4. 1 Calibration interval

To maintain instrument accuracy, perform the calibration of the V-1100/1070 at least every 1000 hours of operations or every six month if used infrequently.

4. 2 Test equipment required

The following test equipment and accessories, or equivalent, are required for the complete calibration of the V-1100/1070. The given specifications for the test equipment are the minimum necessary for accurate calibration. Therefore, the specifications of any test equipment used must meet or exceed the listed specifications.
All the test equipment is assumed to be correctly calibrated and operating within the listed specification. Operating instructions for the test equipment are not given in this procedure. Refer to the instruction manual for the test equipment if more information is needed.

4. 3 Preliminary procedure

This instrument should be calibrated at an ambient temperature of +20 °C (±5 °C) for the best overall accuracy.

1. Connect the instrument to AC line voltage, 48 Hz to 440 Hz line source.
2. Set the instrument controls as given in the Preliminary Control Settings. Allow at least fifteen minutes of warmup before proceeding.
3. See the Adjustment Locations in the pullout pages.

Table 4-1

TEST EQUIPMENT REQUIRED

Description	Minimum Specification	Usage	Examples of Applicable Test Equipment
1. Constant Amplitude Signal Generator	50 kHz reference frequency; maximum frequency 150 MHz; variable amplitude	Check of horizontal, vertical and trigger bandwidth.	
2. Standard Amplitude Calibrator	Amplitude accuracy: 0.25 %, variable amplitude; 5 mV to 40 V; frequency: 1 kHz square wave	Check of horizontal and vertical gain.	
3. Square-ware Generator	Variable frequency: 10 Hz to 1 MHz; output amplitude; 10 mV to 100 V	Check of probe and vertical compensation.	
4. Digital Multimeter	0.1 % accuracy	Check of power supply.	
5. Digital Frequency Counter	0.1 % accuracy	Check of CAL frequency.	
6. Time Mark Generator	0.1 % accuracy	Check of sweep rate	
7. Cable	Impedance, 50 Ω; type, RG-58/U; length, 42 inches, connectors, BNC.	Most check and adjustment with connecting signal.	Hitachi Part No.4202
8. Termination	Impedance, 50 Ω; connectors, BNC.	Check of vertical amplifier compensation	
9. Attenuator	Ratio, 10X; connectors, BNC; impedance, 50 Ω	Check of vertical amplifier bandwidth.	
10. T-Connector	Connectors, BNC.	Check of X-Y operation	Hitachi Part No.1301
11. DC Power Source	0.1 % accuracy	Check of DCV function	

4. 4 Preliminary control settings

Preset the instrument controls to the setting given below, when starting the calibration procedures.

Controls		Setting	Controls	Setting
FOCUS		Midrange	VERT MODE	
SCALE ILLUM		CCW	H.POSITION	Midrange, Push in
TRACE ROTATION		As disired	A TIME/DIV	1 ms/DIV
INTEN-SITY	A & B	Midrange	VAR HOLDOFF	CCW, push in
	B	CCW	Horizontal display mode	A
	READ OUT	CCW	TRIGGER LEVEL	Midrange
POSITION	CH1	Midrange	POSITION CH3	Midrange
	CH2	Midrange, push in	CH4	Midrange
V.VARIABLE		CW, push in	A/B SWP SEP	Midrange
AC-GND-DC		GND	(V-1100 ONLY) CURSOR/DVM	Downside

NOTE

CCW : Counterclockwise
CW : Clockwise

4. 5 Initial starting procedure

1. Turn instrument POWER on.
2. Wait a few seconds for the cathode ray tube (CRT) to warm up. A trace should appear on the display of the CRT.
3. If trace disappears, increase (clockwise) the INTENSITY A & B control setting until the trace is easily observed.

4. Adjust FOCUS control for the best focused display.
5. Readjust POSITION controls if necessary, to center the trace.

POWER SUPPLY SYSTEM

NOTE

Before beginning, see the ADJUSTMENT LOCATIONS in the pullout pages.

Control Settings

Preset the controls as given in the Preliminary Control Setting.

(1) Check Low-voltage Supply, if necessary.

a. Connect the digital voltmeter (DVM) from the +12 volt line.
: +11.975 V to +12.025 V (P1506-3)

b. Connect the DVM from the -12 V line.
: -11.75 V to -12.25 V (P1506-7)

c. Connect the DVM from the +5 V(a) line.
: +4.75 V to +5.25 V (P1506-4)

d. Connect the DVM from the +5 V(d) line.
: +4.75 V to +5.25 V (P1506-5)

e. Connect the DVM from the +45 V line.
: +44 V to +46 V (P1506-2)

f. Connect the DVM from the 100 V line.
: +98 V to +103 V (P1506-1)

(2) Adjust Low-voltage Supply.

Adjust the adjustment RV1525 for DVM reading of +12 V ($\pm$0.025 V).

(3) Check High Voltage Supply.

a. Connect the DVM to the H.V. test point (PEF-676) by High Voltage Probe.

b. Check for a reading of -1800 V to -1920 V

(4) Check/Adjust CRT Bias.

a. Set the horizontal display mode switch to the X-Y position, and AC-GND-DC switch to GND.

b. Rotate the INTENSITY A & B control, and set the voltage of TR1447-Collector to 15 V.

c. Observe the trace of CRT.

d. Adjust Grid Bias Adjustment RV1479 for that the trace makes an appear.

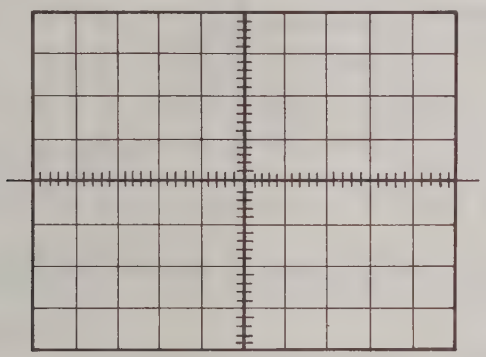
⑤ Check/Adjust Trace Rotation

a. Set the A TIME/DIV switch to 1 ms/DIV, and the horizontal display mode switch to A.

b. Set a trace to the center of screen, using a position control.

c. Check that the trace is aligned with the center horizontal line.

d. Adjust TRACE ROTATION control on the front panel for a trace that is aligned with the horizontal graticule lines.



⑥ Check/Adjust GEOMetry

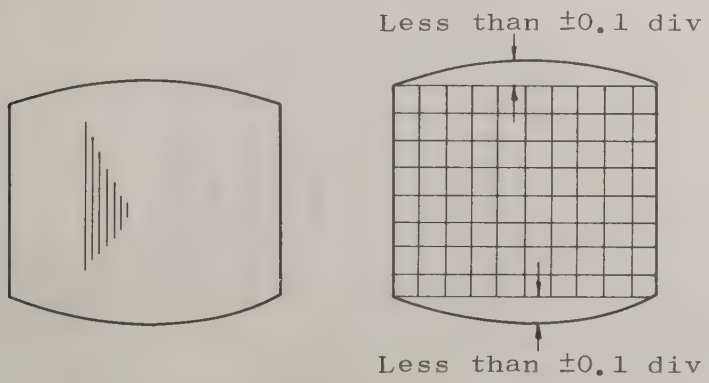
a. Set the A TIME/DIV switch to 0.1 ms/DIV, and AC-GND-DC to DC.

b. Connect a 1 MHz sinewave to the input.

c. Set the signal for a full-screen (8 divisions) deflection.

d. Check that horizontal bowing is less than ±0.1 division.

e. Adjust the GEOM adjustment RV1482 for a display that is parallel with top and bottom horizontal lines.

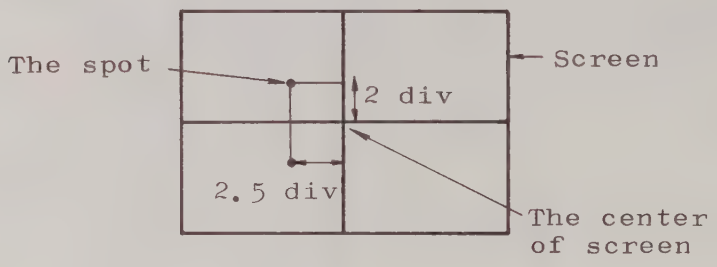


⑦ Check/Adjust ASTIGmatism

a. Set:

Horizontal display mode ---------- X-Y
AC-GND-DC ---------- GND
INTENSITY READOUT ---------- OFF
BW LIMIT 20 MHz ---------- ON

b. Set the spot, as the following figure, using CH1 and CH2 position controls.



c. Rotate the INTENSITY A & B control just before the spot has a halation.

d. Rotate FOCUS control fully clockwise.

e. Check that the spot is round.

f. Adjust the ASTIG adjustment RV1481 for a round spot.

g. Rotate FOCUS control to obtain a smallest spot, and push the BW LIMIT 20 MHz switch off.

HORIZONTAL SYSTEM

Control Settings

Preset the controls as given in the Preliminary Control settings.

⑧ Check/Adjust Sweep Reference.

a. Turn the READOUT control on.

b. Set:

VERT MODE	CH1
CH1 AC-GND-DC	DC
Horizontal display mode	ALT
A TIME/DIV	1 ms/DIV
B TIME/DIV	10 μs/DIV

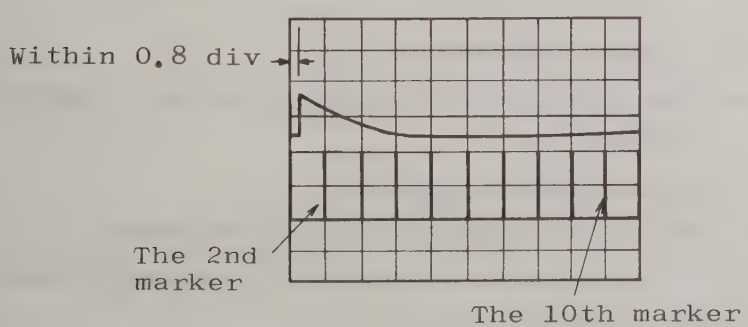
c. (In case of V-1100) Set the CURSOR/DVM select lever to the down position (delay mode).

d. Connect the time mark generator to CH1 and set the time mark generator for 1 ms time marks.

e. Rotate the A/B SWP SEP control to position the B sweep trace for easy observation.

f. Turn the DLY POS control and set the delay time to 9.00 ms. Pressing turn is available for the fast operation.

g. Check the intensified portion of A sweep for align with the tenth time marker and the leading edge of the marker of B sweep for align with the left side graticule line, within 1.0 div.
(If the tenth time marker is off the screen, preadjust the H GAIN adjustment RV 1350, so that the tenth time marker will locate in the screen.)



h. Adjust RV1202 for the leading edge of the marker of B sweep to align with the left side graticule line, within 0.8 div.

i. Set the delay time to 1.00 ms by turning the DLY POS control. Pressing turn is available for the fast operation.

j. Check the intensified portion of A sweep for align with the second time marker and the leading edge of the marker of B sweep for align with the left side graticule line, within 1.2 div.

k. Adjust the DLY 1 DIV adjustment RV1090 for the leading edge of the marker of B sweep to align with the left side graticule line, within 0.8 div.

l. Repeat both RV1202 and RV1090 adjustment for no visible interaction.

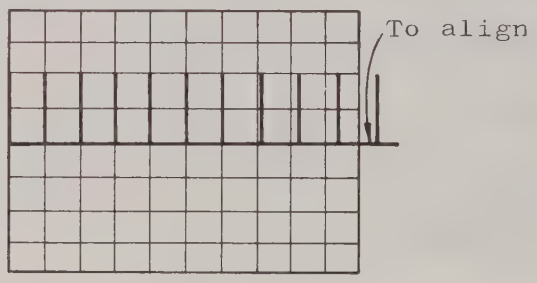
⑨ Check/Adjust Horizontal Gain.

a. Set the horizontal display mode switch to A and A TIME/DIV switch to 1 ms/DIV.

b. Connect a 1 ms time mark generator.

c. Check that the time marks align with the ten divisions graticule lines, within 2 %.

d. Adjust H GAIN adjustment RV1350 for the time marks to align with the graticule lines.



⑩ Check/Adjust Horizontal x10 MAG Gain.

a. Set the horizontal display mode switch to A and the A TIME/DIV switch to 1 ms/DIV.

b. Connect a 1 ms time marker generator.

c. Pull the inner knob of the horizontal POSITION control.

d. Check the one-cycle time marks to align with the ten-divisions graticule lines, within 2 %.

e. Adjust the MAG GAIN adjustment RV1354 for one-cycle time marks to align with the ten-divisions graticule lines.

f. Push in the inner of the POSITION control after the check and adjustment.

⑪ Check/Adjust MAG CENTer

a. Set the A TIME/DIV switch to the 1 ms/DIV.

b. Connect a 1 ms time marker generator.

c. Pull the inner shaft of the horizontal POSITION and align the second time marker with the center vertical graticule line.

d. Push the inner shaft.

e. Check the discrepancy of the second time marker from the center vertical graticule line, within $\pm$0.5 division.

f. Adjust the MAG CENT adjustment RV1351 for the discrepancy within $\pm$0.2 division.

⑫ Check/Adjust TIME/DIV

a. Set:

VERT MODE CH1

CH1 VOLTS/DIV ..... As required for well observation

CH1 AC-GND-DC ..... DC

b. Connect the time marker generator to CH1.

c. Set the TIME/DIV switch and the time marker generator as the following.

d. Check and adjust that the time marks align with the ten divisions graticule lines, within 2 %.

Item No.	Display mode	A TIME/DIV	B TIME/DIV	Time Marker	Adjustment
(1)	A	0.1 μs/DIV	———	0.1 μs	CV1225
(2)	A	10 μs/DIV	———	10 μs	RV1208
(3)	A	10 ms/DIV	———	10 ms	RV1201
(4)	A	(2 ns/DIV 20 ns/DIV, pull x 10 MAG)	———	2 ns	CV1381
(5)	B	0.2 μs/DIV	0.1 μs/DIV	0.1 μs	CV1271
(6)	B	20 μs/DIV	10 μs/DIV	10 μs	RV1278
(7)	B	2 ms/DIV	1 ms/DIV	1 ms	RV1272
(8)	B	20 ms/DIV	10 ms/DIV	10 ms	RV1271

VERTICAL SYSTEM

Control Setting

Preset the controls as given in the Preliminary Control Settings.

⑬ Check/Adjust DC BAL

a. Set the VERT MODE switch to CH1.

b. Pull the CH1 VARiable control knob for x5 GAIN.

c. Set the CH1 VOLTS/DIV switch to 20 mV/DIV and the CH1 AC-GND-DC Switch to GND.

d. Position the trace to the center horizontal graticule line.

e. Change the CH1 VOLTS/DIV switch to the 50 mV/DIV.

f. Check that the discrepancy of the trace is within 0.3 division of the center horizontal graticule line.

g. Adjust the CH1 DC BAL1 adjustment RV28 for the discrepancy within 0.1 division of the center horizontal graticule line.

h. Set the CH1 VOLTS/DIV switch to 5 mV/DIV.

i. Position the trace to the center horizontal graticule line.

j. Push the CH1 VARiable control knob (x1 GAIN).

k. Check that the discrepancy of the trace is within 0.3 division of the center horizontal graticule line.

l. Adjust the CH1 DC BAL2 adjustment RV44 for the trace within 0.1 division of the center horizontal graticule line.

m. Change the VERT MODE switch to CH2.

n. Repeat part b. through f. for CH2.

o. Adjust the CH2 DC BAL1 adjustment RV128 for the trace within 0.1 division of the center horizontal graticule line.

p. Repeat part h. through k. for CH2.

q. Adjust the CH2 DC BAL2 adjustment RV144 for the trace within 0.1 division of the center horizontal graticule line.

⑭ Check/Adjust POSition CENTer

a. Set the VERT MODE switch to CH1.

b. Set the POSITION control at the midrange.

c. Check that the trace is within 1 division of the center horizontal graticule line.

d. Adjust the CH1 POSition CENTer adjustment RV60 for the trace align with the horizontal center line.

e. Change the VERT MODE switch to CH2.

f. Repeat part b. through c. for CH2.

g. Adjust the CH2 POSition CENTer adjustment RV160 for the trace at the horizontal center line.

h. Push both the QUAD and ALT buttons of the VERT MODE.

i. Reapeat part b. through c. for CH3.

j. Adjust the CH3 position center adjustment RV337 for a trace at the horizontal center line.

k. Repeat part b. through c. for CH4.

l. Adjust the CH4 position center adjustment RV387 for a trace at the horizontal center line.

⑮ Check/Adjust ADD Balance

a. Set the VERT MODE switch to ALT (or CHOP).

b. Position both CH1 and CH2 traces to coincide at the center horizontal graticule line.

c. Change the VERT MODE switch to ADD (press both the CH1 and CH2 buttons).

d. Check that the trace added CH1 and CH2 is within ±0.4 division from the center horizontal graticule line.

e. Adjust RV515 for the trace within ±0.2 division from the center horizontal graticule line.

⑯ Check/Adjust X1 DC GAIN

a. Set:

VERT MODE CH1
CH1, CH2 VOLTS/DIV ..... 10 mV/DIV
A TIME/DIV ..... 1 ms/DIV
CH1, CH2 AC-GND-DC ..... DC

b. Connect the square-wave generator (using 1 kHz output range) to CH1.

c. Adjust the output amplitude of that generator for 5 divisions deflection of screen.

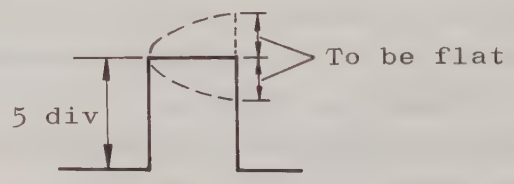
d. Check the high-voltage level of pulse is flat.

e. Adjust the CH1 x1 DC GAIN RV45 for a flat level.

f. Move the signal to CH2 and change the VERT MODE switch to CH2.

g. Repeat part b. through d. for CH2.

h. Adjust the CH2 x1 DC GAIN adjustment RV145 for a flat level.



⑰ Check/Adjust x5 DC GAIN

a. Set:

VERT MODE CH1
CH1, CH2 VOLTS/DIV ..... 10 mV/DIV
A TIME/DIV ..... 1 ms/DIV
CH1, CH2 AC-GND-DC ..... DC

b. Pull the CH1 VARiable control knob for x5 GAIN.

c. Connect the square-wave generator (using 1 kHz output range) to CH1.

d. Adjust the output amplitude of that generator for 5 divisions deflection of screen.

e. Check the high-voltage level of pulse is flat.

f. Adjust the CH1 x5 DC GAIN adjustment RV46 for a flat level.

g. Move the signal to CH2 and change the VERT MODE switch to CH2.

h. Repeat part b. through e. for CH2.

i. Adjust the CH2 x5 DC GAIN adjustment RV146 for a flat level.

⑱ Check/Adjust VERTICAL GAIN

a. Set the VERT MODE switch to the CH1 position.

b. Connect the standard amplitude calibrator to the CH1 input connector.

c. Set the CH1 VOLTS/DIV switch to the 10 mV and the CH1 AC-GND-DC switch to DC.

d. Set the standard amplitude calibrator for a 50 mVp-p signal.

e. Check for a 5 divisions display.

f. Adjust the V GAIN adjustment RV525 for a display for 5 divisions within 2 %.

g. Change the VERT MODE switch to CH2, and move the signal to CH2.

h. Repeat part b. through e. for CH2.

i. Adjust the CH2 GAIN adjustment RV153 for a display of 5 divisions within 2 %.

j. Push both the QUAD and ALT buttons of VERT MODE.

k. Move the signal to CH3.

l. Set the standard amplitude calibrator for a 0.5 Vp-p.

m. Set the CH3 0.1 V/DIV, 0.5 V/DIV switch to 0.1 V/DIV.

n. Check for a 5-divisions display.

o. Adjust the CH3 GAIN adjustment RV335 for a display of 5 divisions within 2 %.

p. Move the signal to CH4.

q. Set the CH4 0.1 V/DIV, 0.5 V/DIV switch to the 0.1 V/DIV.

r. Check for a 5-divisions display.

s. Adjust the CH4 GAIN adjustment RV385 for a display of 5 divisions within 2 %.

⑲ Check/Adjust CH1, CH2 Step Response.

a. Set:

VERT MODE	CH1
CH1, CH2 VOLTS/DIV	10 mV/DIV
CH1, CH2 AC-GND-DC	DC
A TIME/DIV	20 ns

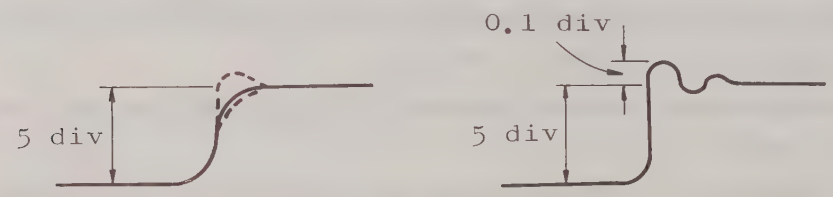
b. Connect the fast-rise (less than 1 ns), positive output of the square-wave generator to the CH1 input. Use a 50-ohm termination and cable.

c. Set the square-wave generator to 1 MHz. Adjust the square-wave generator output for a 5-divisions display.

d. Set RV58 and CV58 to the midposition. And adjust CV513, CV531, CV533 and RV513 for a square wave that is flat. Then, adjust RV58 and CV58 for over-shoot that is +0.1 div.

e. Move the signal to CH2 and set the VERT MODE to CH2.

f. Adjust CV158 and RV158 for over-shoot that is +0.1 div.



⑳ Check/Adjust CH1, CH2 Attenuation Compensation.
(ATT: ÷10, ÷100, ÷250)

a. Set the VERT MODE switch to CH1 and the CH1 and CH2 AC-GND-DC switch to DC.

b. Connect the square-wave (10 kHz) generator to the CH1 input terminal check for a square wave that is flat (flat top) under the following settings.

ATT	VOLTS/DIV	The square-wave generator output
÷ 10	50 mV	0.25 V
÷100	0.5 V	2.5 V
÷250	5 V	25 V

c. Adjust the trimmer condensers (refer to the circuit board illustration) for a square (flat top) under the following settings.

ATT	VOLTS/DIV	The square-wave generator output	Adjust
÷ 10	50 mV	0.25 V	Comp-1/10
÷100	0.5 V	2.5 V	Comp-1/100
÷250	5 V	25.0 V	Comp-1/250

d. Move the signal to CH2 and set the VERT MODE switch to CH2.

e. Repeat part b. through c. for CH2.

(21) Check/Adjust CH1, CH2 Input Capacity. (ATT: ÷10, ÷100, ÷250).

a. Connect the L-C meter to the input terminal.

b. Check the input capacity for a approximately 28 pF.

c. Adjust the trimmer condensers for a 28 pF input capacity under the following settings.

ATT	VOLTS/DIV	Adjust CH1 (CH2)
÷1	10 mV	Cin - 1/10
÷10	0.1 V	Cin - 1/100
÷100	1 V	Cin - 1/250

(22) Check/Adjust CH3, CH4 Attenuator Compensation

a. Set:

VERT MODE ..... ALT, QUAD (both buttons in)

CH3, CH4 .5V/DIV
.1V/DIV ..... .5V/DIV (button in)

CH3, CH4 DC ..... DC (button in)
AC

b. Connect the square-wave generator to CH3 input.

c. Check for a square wave that is flat (flat top).

d. Adjust CV310 for a square wave that is flat (flat top).

e. Move the signal to CH4.

f. Check and adjust CV360 for a square wave that is flat (flat top).

(23) Check/Adjust CH3, CH4 Input Capacity

a. Set:

VERT MODE ..... ALT, QUAD (both buttons in)

CH3, CH4 .5 V/DIV
.1 V/DIV ..... .5 V/DIV (button in)

b. Connect the L-C meter to CH3 (or CH4)

c. Check the input capacity for approximately 28 pF.

d. Adjust CV305 (or CV355 for CH4) for a 28 pF input capacity.

(24) Check/Adjust CH3, CH4 Step Response.

a. Set:

VERT MODE	.....	ALT, QUAD (both buttons in)
CH3, CH4 .5 V/DIV / .1 V/DIV	.....	.1 V/DIV (button off)
A TIME/DIV	.....	20 ns

b. Connect the fast-rise (less than 1 ns), positive output of the square-wave generator to the CH3 input. Use a 50-ohm termination and cable.

c. Set the square-wave generator to 1 MHz. Adjust the square-wave generator output for a 5-divisions display.

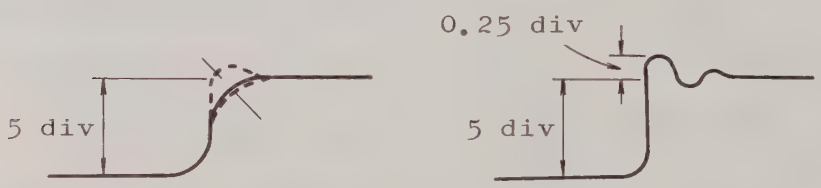
d. Check for over-shoot within ±0.35 division.

e. Adjust CV336 for over-shoot within ±0.25 division.

f. Move the signal to CH4.

g. Check for over-shoot within ±0.35 division.

h. Adjust CV386 for over-shoot that is within ±0.25 division.



TRIGGER

(25) Check/Adjust TRIGer CENTer

(1) A TRIG LEVEL CENT

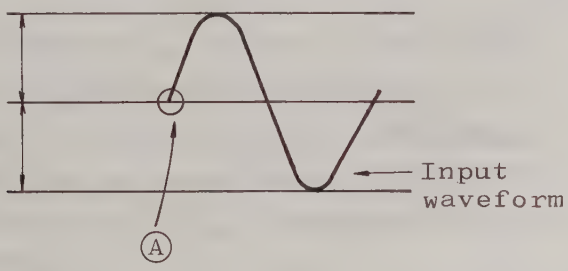
a. Set:

A TRIG SOURCE	.....	CH1
A TRIG COUPLING	.....	AC
A TRIG SLOPE	.....	+
VERT MODE	.....	CH1
VOLTS/DIV	.....	10 mV/DIV
TIME/DIV	.....	20 μs/DIV

b. Connect a sine-wave generator to the CH1 input for 2 div (50 kHz) to CH1.

c. Set the A TRIGGER LEVEL knob to the midposition.

d. Adjust RV858 for trigger effected on the point (A) of the waveform.



(2) CH1 TRIG LEVEL CENT

e. Set the A TRIGGER COUPLING to DC.

f. Adjust RV801 for trigger effected on the point (A) of the waveform.

(3) CH2 TRIG LEVEL CENT

g. Move the signal to CH2.

h. Change the VERT MODE switch to CH2 and A TRIGGER SOURCE to CH2.

i. Adjust RV802 for trigger effected on the point (A) of the waveform.

(4) CH3 TRIG LEVEL CENT

j. Move the signal to CH3.

k. Push both the QUAD and ALT buttons of VERT MODE.

l. Change the A TRIGGER SOURCE to CH3.

m. Set the 0.1 V/DIV, 0.5 V/DIV switch to the 0.1 V/DIV position for CH3.

n. Set the generator for 2 divisions display.

o. Adjust RV803 for trigger effected on the point (A) of the waveform.

(5) CH4 TRIG LEVEL CENT

p. Move the signal to CH4.

q. Change the A TRIG SOURCE switch to CH4, and push both the QUAD and ALT buttons of VERT MODE.

r. Set the 0.1 V/DIV, 0.5 V/DIV switch to the 0.1 V/DIV position for CH4.

s. Adjust RV804 for trigger effected on the point (A) of the waveform.

(6) B TRIG LEVEL CENT

a. Set:

VERT MODE CH1
VOLTS/DIV ..... 10 mV/DIV
A TIME/DIV ..... 20 μs/DIV
B TIME/DIV ..... 5 μs/DIV
A and B triggering ..... SOURCE : CH1
COUPLING: AC
B MODE : NORM
SLOPE : +
Horizontal display mode ..... INTEN
A and B TRIG LEVEL ..... Midposition

b. Connect a sine-wave generator to the CH1 input for 2 div (50 kHz).

c. Adjust RV940 for trigger effected on the point (A) of the waveform.

X - Y OPERATION

(26) Check/Adjust X Gain

a. Set:

CH1 VOLTS/DIV ..... 10 mV/DIV
CH1 AC-GND-DC ..... AC
CH2 AC-GND-DC ..... DC
Horizontal display mode ..... XY

b. Connect the standard amplitude calibrator to CH1.

c. Set the standard amplitude calibrator for 50 mV.

d. Check for a display of 5 divisions within ±3 %.

e. Adjust RV1320 for a display of 5 division within ±1.5 %.

(27) Check/Adjust X CENTer

a. Set:

CH1 AC-GND-DC ..... GND
Horizontal display mode ..... XY
Horizontal POSITION ..... Midrange

b. Check for a spot at the center vertical graticule line within ±1.0 division.

c. Adjust RV1324 for a spot at the center vertical graticule line within ±0.2 division.

SIGNAL OUTPUT

㉘ Check/Adjust CALibrator

a. Jumper between ① pin and ② pin of P1607.

b. Connect a digital voltage meter to the CAL terminal.

c. Check for CAL output voltage 0.495 V to 0.505 V.

d. Adjust RV1606 for CAL output voltage 0.495 V to 0.505 V.

㉙ Check/Adjust CH1 OUT DC LEVEL

a. Set the CH1 AC-GND-DC switch to GND and the VERT MODE switch to CH1.

b. Connect a digital voltage meter to the CH1 OUT terminal.

c. Check for the voltage 0 V within ±0.1 V.

d. Adjust RV247 for the voltage 0 V within ±0.1 V.

READOUT & CURSOR

㉚ Check/Adjust Readout gain.

(In case of V-1100)

a. Set READOUT INTENSITY control as required for well defind the character.

b. Set:

VERT MODE CH1
CURSOR/DLY POS ..... CURSOR (up position)
CURSOR mode V
Horizontal display mode ..... A

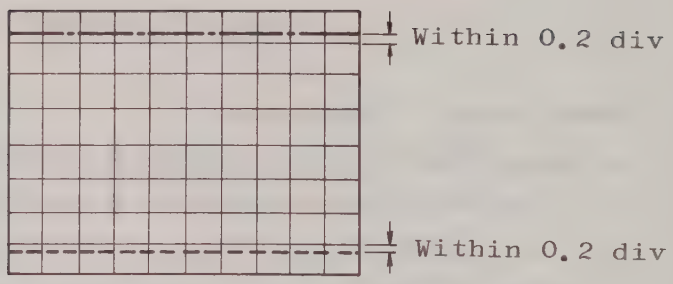
c. Jumper between ① pin and ② pin of P1607 (set calibration mode).

d. Check the delta and REF cursors align with the horizontal graticule line within ±0.2 div. (see the below figure)

e. Adjust RV583 for 6 divisions between the delta and REF cursors.

f. Adjust RV588 for the delta and REF cursors align with horizontal graticule line (see figure).

g. Repeat item e. through f. until the cursors are just align the graticule.



(In case of V-1070)

a. Set READOUT INTENSITY control as required for well defind the character.

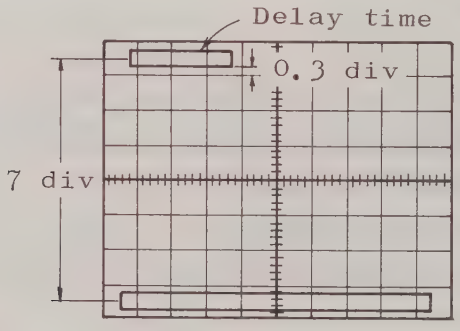
b. Set:

VERT MODE ..... ALT

Horizontal display mode ..... ALT

c. Check the distance between the upper readout and the lower for about 7 division as shown below.

d. Adjust RV583 for about 7 divisions' distance of the upper and lower readouts.



e. Check the distance between the lower part of the delay time readout and the second horizontal graticule line from the top for about 0.3 division as shown above.

f. Adjust RV588 for 0.3 division's distance.

g. Repeat item c. through f. for the readout location as shown above.

(31) Check/Adjust Cursor center (V-1100 only)

a. Set READOUT INTENSITY control as required for well defind the character.

b. Set:

VERT MODE	CH1
CURSOR/DLYPOS	CURSOR (up position)
CURSOR mode	GND REF
Horizontal display mode	A
CH1 POSITION	midrange

c. Check the GND REF CURSOR align with the trace within 0.2 DIV.

d. Adjust RV619 for just align the trace.

(32) Check/Adjust CHR-X gain

(In case of V-1100)

a. Set READOUT INTENSITY control as required for well defind the character.

b. Set:

VERT mode	CH1
CURSOR/DLYPOS	CURSOR (up position)
CURSOR mode	T
Horizontal display mode	A
TIME/DIV	1 ms/DIV

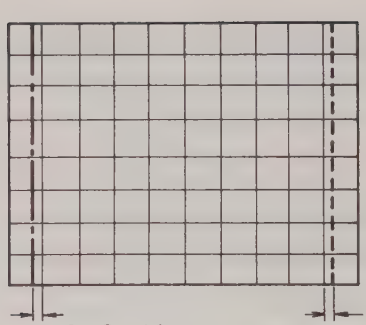
c. Jumper between ① pin and ② pin of P1607 (Set calibration mode).

d. Check the delta and REF cursors align with the vertical graticule line within 0.2 DIV (see the below figure).

e. Adjust RV1343 for the delta and REF cursors just align with vertical graticule line (see the below figure).

f. Adjust RV1328 for the delta and REF cursors align with horizontal graticule line (see the below figure).

g. Repeat item e. through f. the cursors are just align with the graticule.



(In case of V-1070)

a. Set READOUT INTENSITY control as required for well define the character.

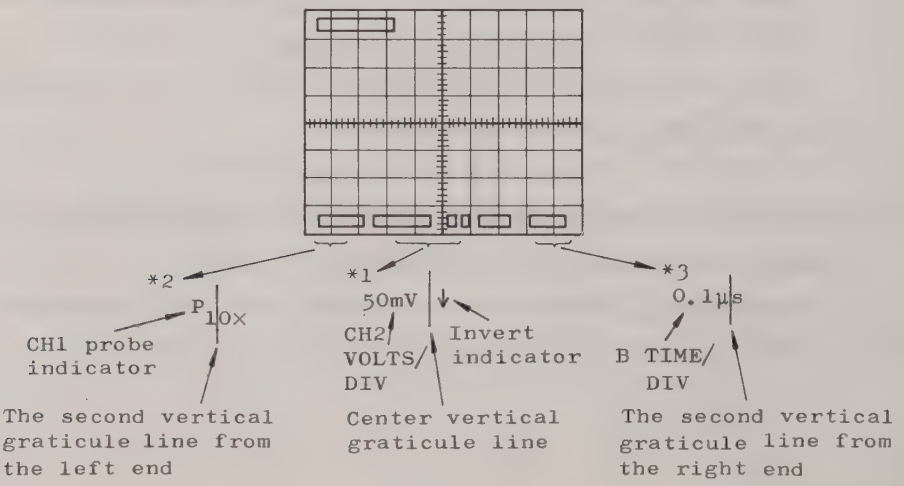
b. Set:

VERT MODE	ALT
Horizontal display mode	ALT
CH2 POSITION	INVERT (pull)
CH2 VOLTS/DIV	5 mV/DIV
B sec/DIV	0.1 μs/DIV

c. Rotate the CURSOR control to right (+) with pressing the RESET button.
(Then, probe indicator 'P10x' is displayed on the CRT.)

d. Check that the CH2 invert indicator (↓) locates on the right of the center vertical graticule line like * 1 shown in below figure.

e. Adjust RV1328 for the CH2 invert indicator (↓) location like * 1 shown in below figure.



f. Check that the locations of the CH1 probe indicator 'P10x' and B TIME/DIV indicator are like ＊2 and ＊3 shown above figure.

g. Adjust RV1343 as the locations of the CH1 probe indicator 'P10x' and B TIME/DIV indicator are like ＊2 and ＊3 shown above figure.

h. Repeat item c. through g. for the readout location as shown above.

DVM

(33) Check/Adjust DVM function (V-1100 only)

(1) DCV

a. Set READOUT INTENSITY control as required for well defind the character.

b. Set:

VERT MODE CH1
CURSOR/DVM ..... DVM (down position)
DVM mode ..... DCV, NORM (both buttons in)
CH1 VOLTS/DIV ..... 20 mV/DIV
CH1 AC-GND-DC ..... DC

c. Connect 100 mV DC voltage to CH1 input.

d. Check for the display on the upper side of CRT 100 mV $\pm$1.5 mV.

e. Adjust RV2658 for the display 100 mV $\pm$ 1.5 mV.

(2) ACV

f. Set:

CURSOR/DVM ..... DVM (down position)
DVM mode ..... ACV, NORM (both buttons in)
CH1 VOLTS/DIV ..... 50 mV/DIV
CH1 AC-GND-DC ..... AC

g. Connect a 200 mVp-p 50 kHz sinewave to CH1 input.

h. Check for the display on the upper side of CRT 70.7 mV $\pm$ 5.3 mV.

i. Adjust RV2657 for the display 70.7 mV $\pm$ 5.3 mV.

(Note)

$$Vrms = \frac{Vp\text{-}p}{2\sqrt{2}}$$

(3) FREQ

j. Set:

CURSOR/DVM ..... DVM (down position)

DVM mode ..... FREQ

CH1 VOLTS/DIV ..... 50 mV/DIV

CH1 AC-GND-DC ..... AC

k. Connect a 50 kHz sinewave to CH1 input.

l. Set the waveform 1-division display.

m. Observe the signal of IC2302- ⑨ (TP-1) by a oscilloscope.

n. Adjust RV2300 for the waveform maximum amplitude.

5. READOUT ERROR CORD LIST

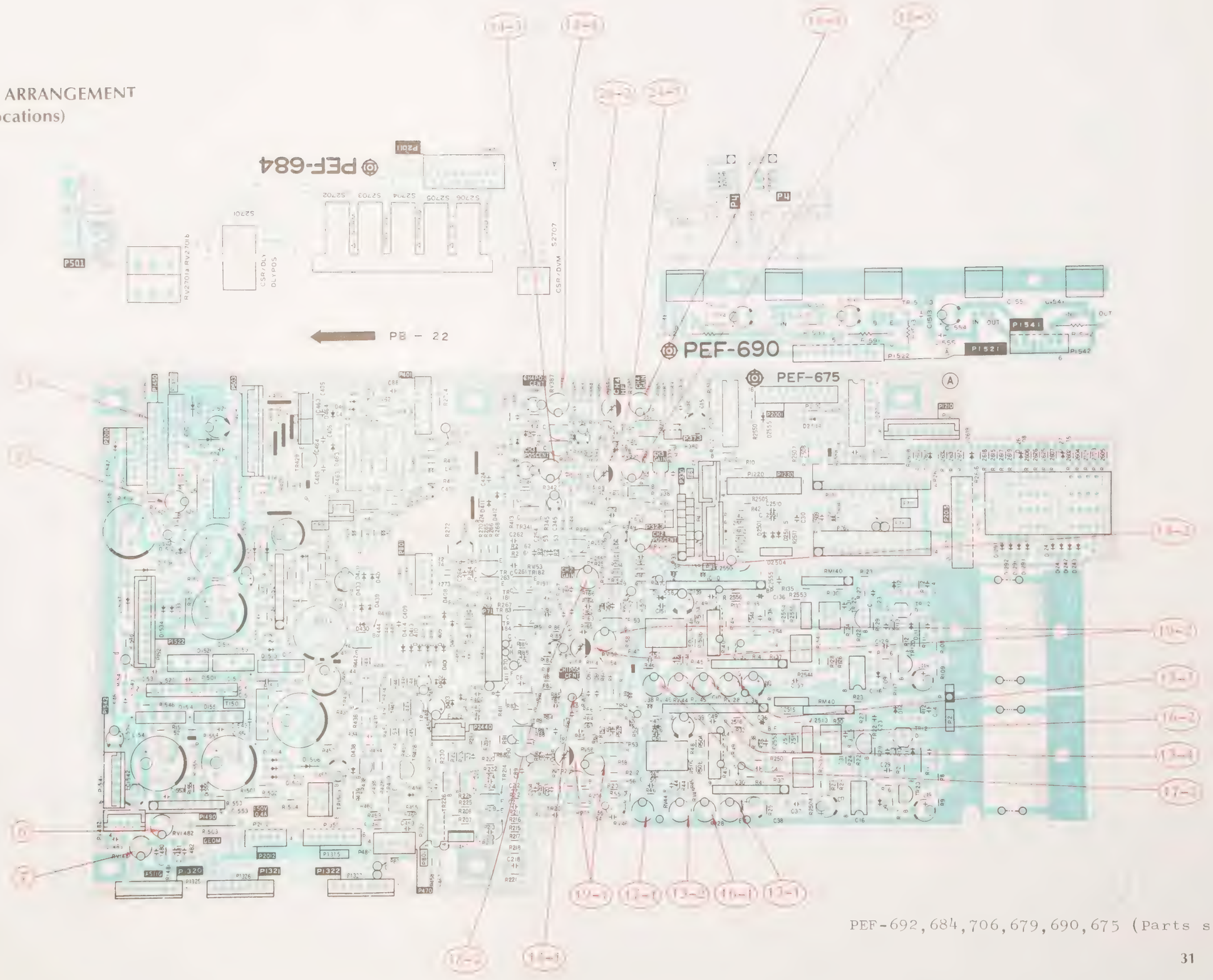
When the digital control unit reads the irregular panel setup information, it displays the readout error cord on the CRT. Check the following check-point for each error cord.

ERROR CORD	ERROR STATUS	CHECK POINT
SW NG 0	CH1 ÷1, ÷10, ÷100, ÷ 250	IC2701 - ⑬
SW NG 1	CH1 ÷1, ÷ 2, ÷ 4	IC2701 - ⑭
SW NG 2	CH2 ÷1, ÷10, ÷ 100, ÷ 250	IC2701 - ⑮
SW NG 3	CH2 ÷1, ÷ 2, ÷ 4	IC2701 - ⑫
SW NG 4	CH1 VAR, CH2 VAR	IC2701 - ①
SW NG 5	CH1, CH2, CHOP	IC2701 - ⑤
SW NG 6	QUAD, BWL	IC2701 - ②
SW NG 7	A, ALT, B	IC2702 - ①
SW NG 8	A, sec/DIV-1	IC2702 - ⑬
SW NG 9	A, sec/DIV-2	IC2702 - ⑭
SW NG 10	B, sec/DIV-1	IC2702 - ⑮
SW NG 11	B, sec/DIV-2	IC2702 - ⑫

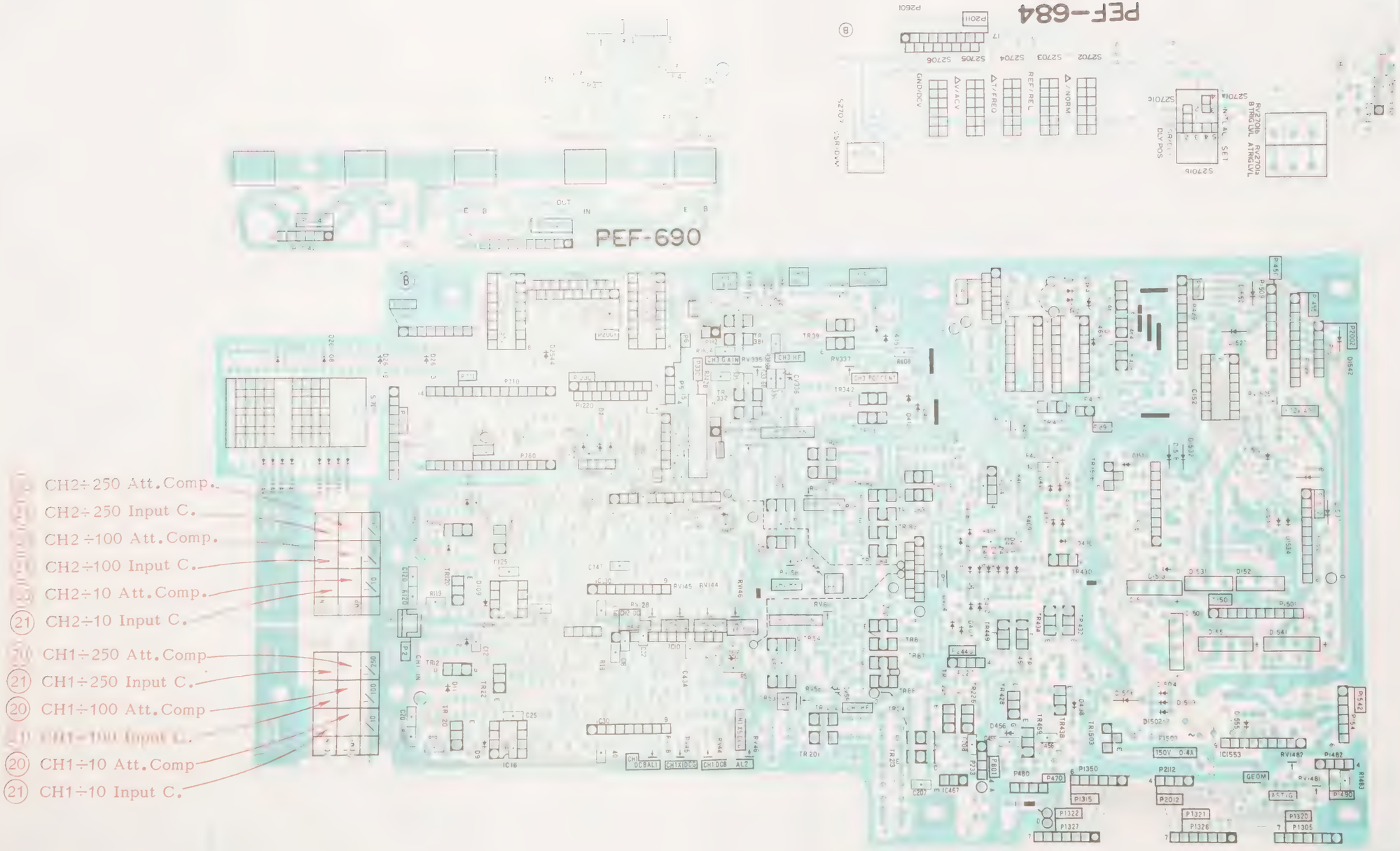
- NOTE -

IC2701, IC2702 are drawn in the schematic diagram ◈8◈.

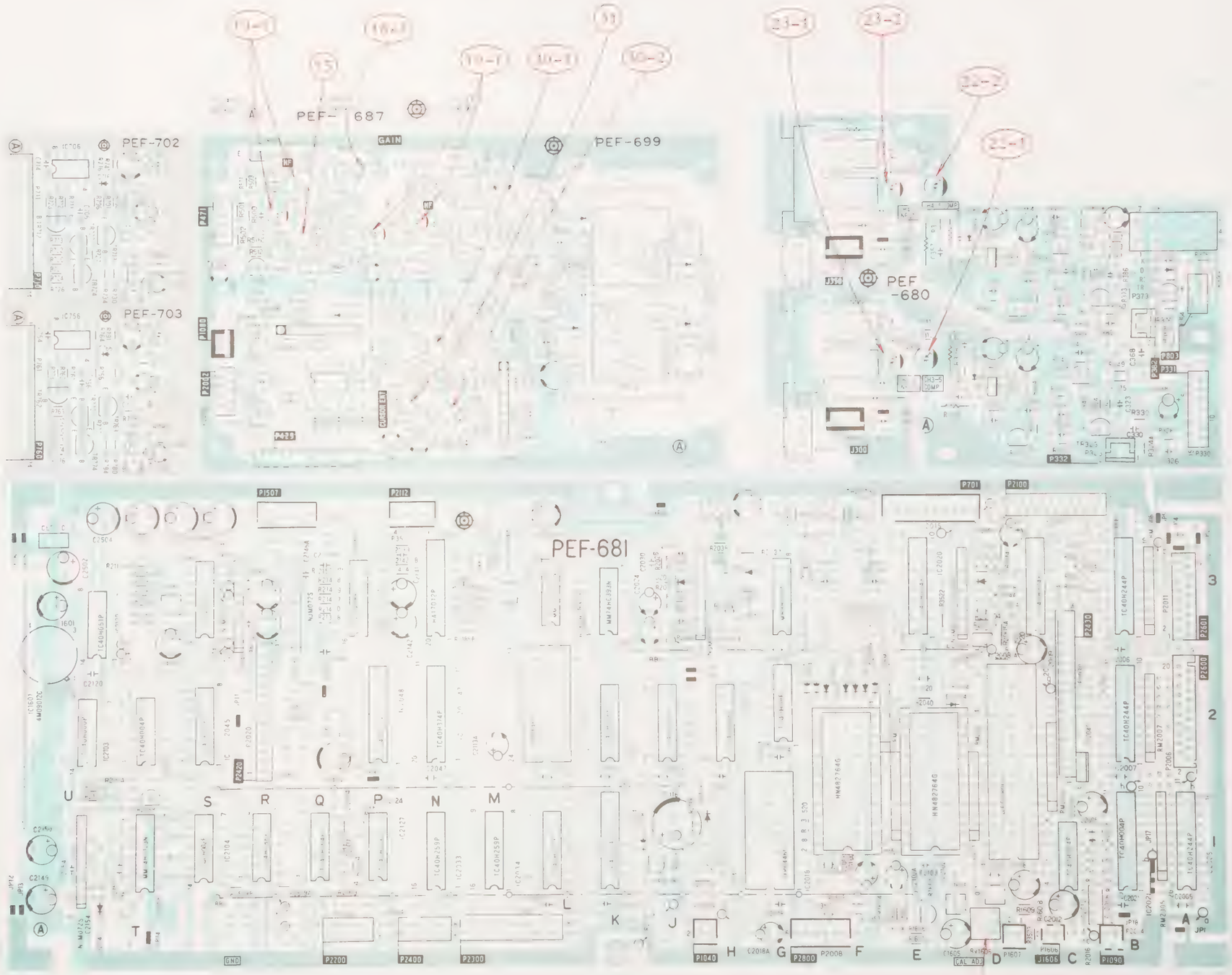
6. ELECTRICAL PARTS ARRANGEMENT (with adjustment locations)



PEF-692,684,706,679,690,675 (Parts side)

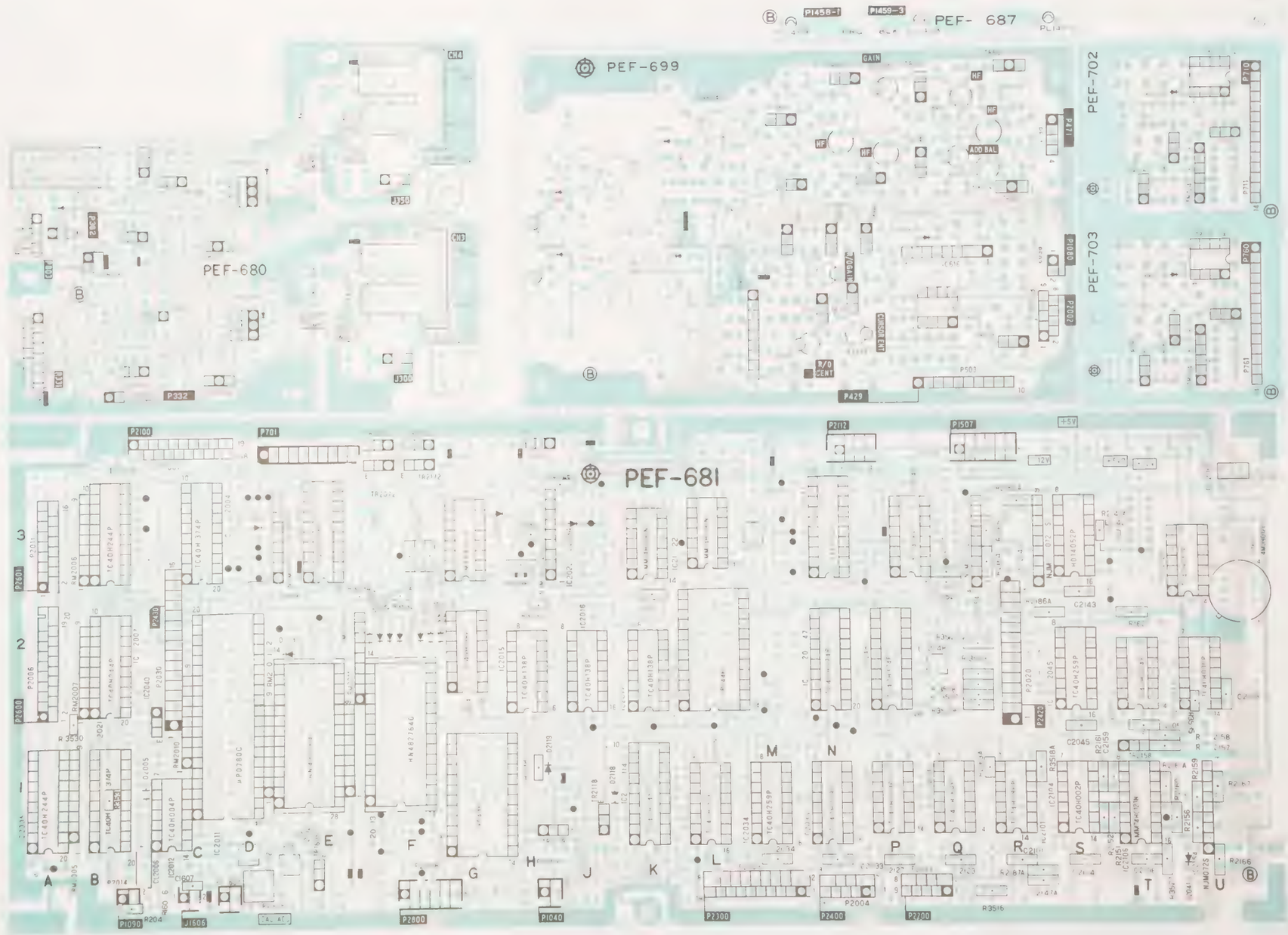


PEF-679,706,684,690,675,692 (Soldering side)

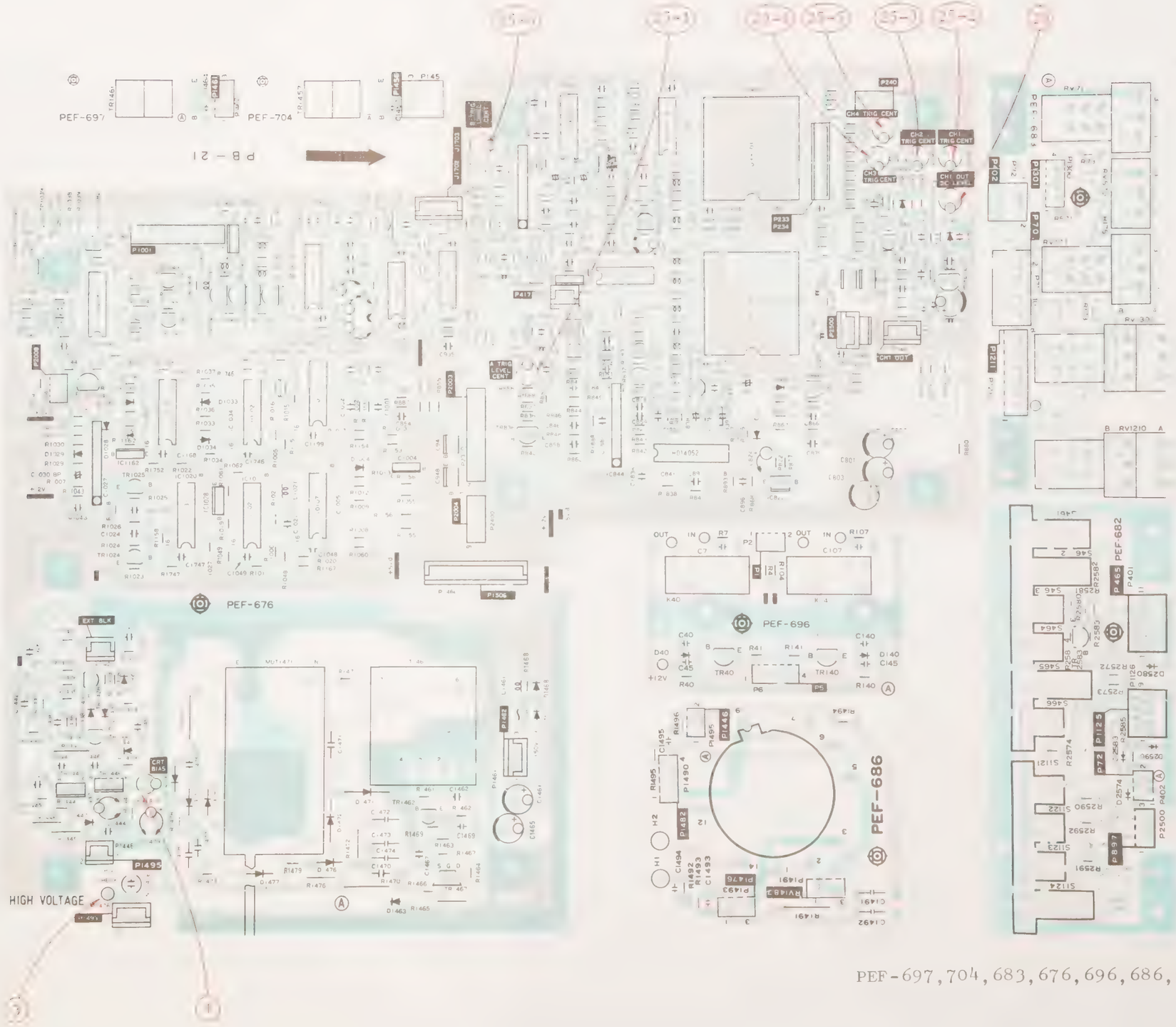


PEF-702,703,687,699,680,681 (Parts side)

28



PEF-680,699,687,702,703,681 (Soldering side)



PEF-697,704,683,676,696,686,682 (Parts side)

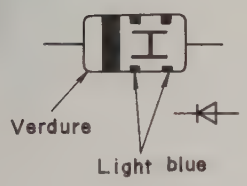
PEF-685,691,678,689,677,688 (Parts side)

7. ELECTRICAL PARTS LEAD CONFIGURATIONS

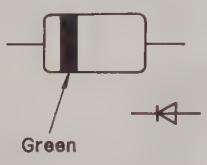
Lead configurations and case styles are typical, but may vary due to vendor changes or instrument modifications.

—DIODES—

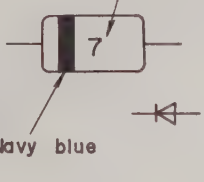
ISS 83



MA 161

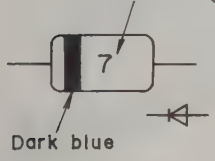


HZ-Serie
Type No. (Navy blue)

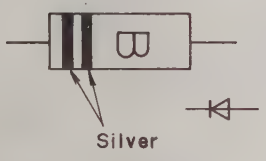


ISS 133

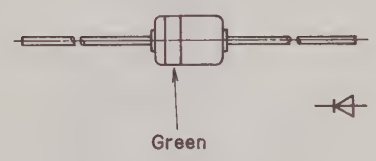
MTZ Series
Type No. (Dark blue)



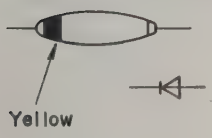
S 5566 B



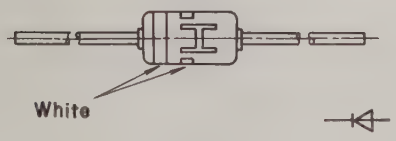
ISS 165



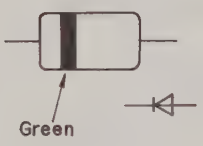
Y-10GA



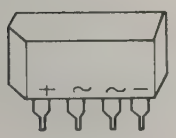
ISS 106



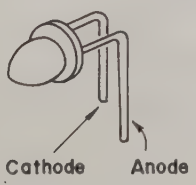
ISS 110



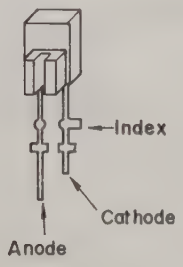
DBA 10C



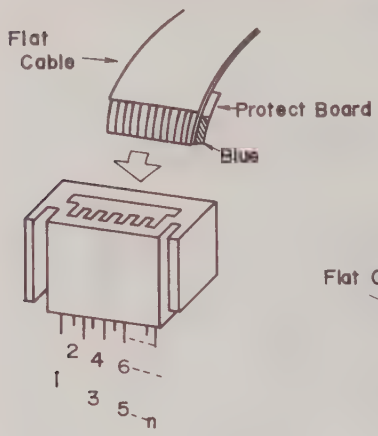
LN 21RPH-(LF)

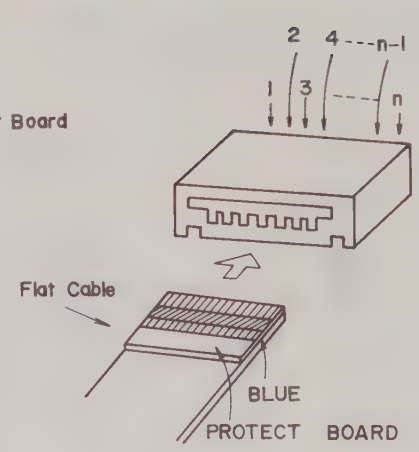


SLB-26VR 5F-G (Red)
SLB-26MG 5F-H (Green)

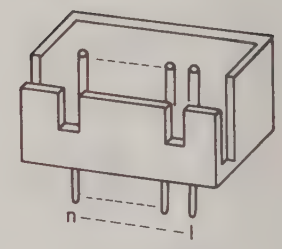


—CONNECTORS—



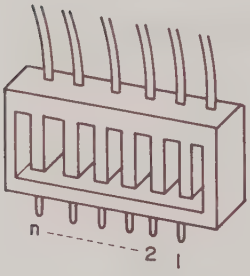


CF-0XX

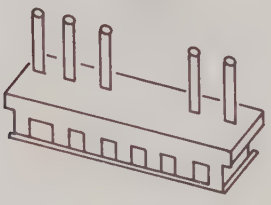


BXXB-XH-A

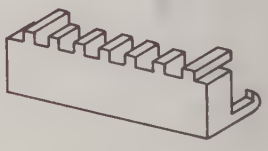
CF-1XX



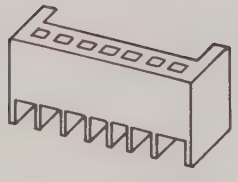
Board-in Connector



BXXD-SHF-GB

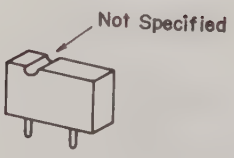


SSQ-BXXP-GB



SQ-BXXP-GB-C

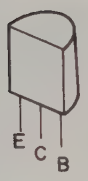
—Fuse—



ICP-FXX

—TRANSISTORS—

Standard



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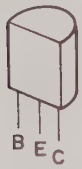
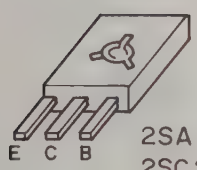
2SC2026
2SC2408





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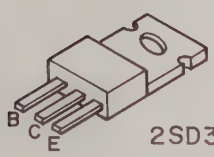
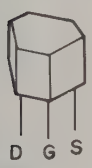


2SD313E
2SD1138

2SC1252

FET
2SK404E



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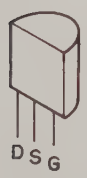

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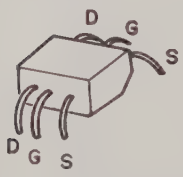
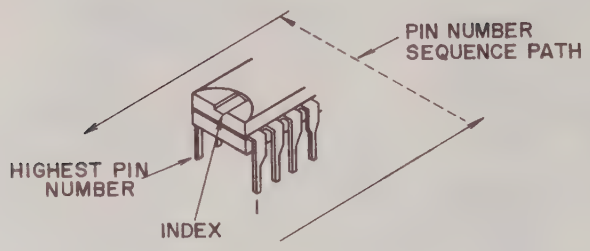
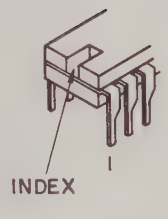


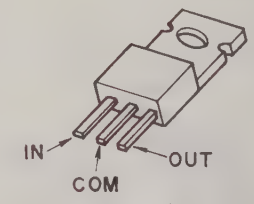
—INTEGRATED CIRCUITS—

DIP type IC

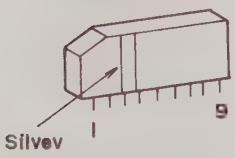




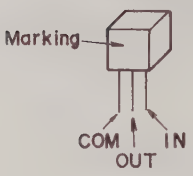
HA 17805P



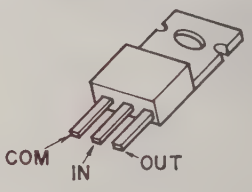
NJM XXXXS



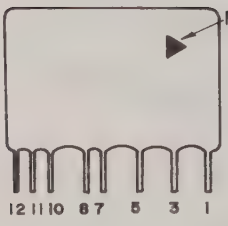
UN 4213



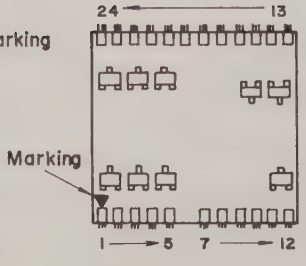
μPC 7912H



UH-100



UH-101



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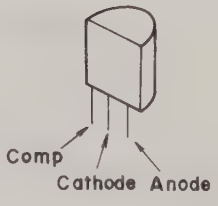

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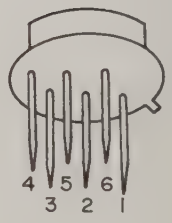

8. ELECTRICAL PARTS LIST

PEF-675 V PREAMP, TIMING CKT, POWER SUPPLY

Qty: A:V-1100, B:V-1070

Symbol	Part Code	Description		Q'ty A	Q'ty B
IC10	8410385	IC, Hybrid	UH-100	1	1
IC16	8397023A	IC, Analog	LF411CN	1	1
IC30	ILB0010	IC, Analog	BA715	1	1
IC110	8410385	IC, Hybrid	UH-100	1	1
IC116	8397023A	IC, Analog	LF411CN	1	1
IC130	ILB0010	IC, Analog	BA715	1	1
IC461	IDH0630	IC, Digital	HD74LS157P	1	1
IC462	IDH0713	IC, Digital	HD74LS109AP	1	1
IC463	ILU0010	IC, Analog	UN4213	1	
IC464	ILU0010	IC, Analog	UN4213	1	
IC467	ILU0010	IC, Analog	UN4213	1	1
IC1516	ILN0046	IC, Analog	NJM2904S	1	1
IC1521	ILH0019	IC, Analog	HA17723G	1	1
IC1553	ILN0046	IC, Analog	NJM2904S	1	1
IC2701	IDH0800	IC, Digital	HD14051BP (MC14051BCP)	1	1
IC2702	IDH0800	IC, Digital	HD14051BP (MC14051BCP)	1	1
TR12	HTK0063	Transistor	2SK152-3	1	1
TR20	HTC0057	Transistor	2SC1674K	1	1
TR22	HTC0814	Transistor	2SC3355	1	1
TR53	HTC0814	Transistor	2SC3355	1	1
TR54	HTC0814	Transistor	2SC3355	1	1
TR81	HTA0290	Transistor	2SA1206	1	1
TR82	HTA0290	Transistor	2SA1206	1	1
TR87	HTA0290	Transistor	2SA1206	1	1
TR88	HTA0290	Transistor	2SA1206	1	1
TR112	HTK0063	Transistor	2SK152-3	1	1
TR120	HTC0557	Transistor	2SC1674K	1	1
TR122	HTC0814	Transistor	2SC3355	1	1
TR153	HTC0814	Transistor	2SC3355	1	1
TR154	HTC0814	Transistor	2SC3355	1	1
TR181	HTA0290	Transistor	2SA1206	1	1
TR182	HTA0290	Transistor	2SA1206	1	1
TR183	HTA0290	Transistor	2SA1206	1	1
TR184	HTA0290	Transistor	2SA1206	1	1
TR201	HTC0814	Transistor	2SC3355	1	1
TR202	HTC0814	Transistor	2SC3355	1	1
TR213	HTA0290	Transistor	2SA1206	1	1
TR214	HTA0290	Transistor	2SA1206	1	1
TR251	HTC0814	Transistor	2SC3355	1	1
TR252	HTC0814	Transistor	2SC3355	1	1
TR263	HTA0290	Transistor	2SA1206	1	1
TR264	HTA0290	Transistor	2SA1206	1	1
TR331	HTC0814	Transistor	2SC3355	1	1
TR332	HTC0814	Transistor	2SC3355	1	1
TR341	HTA0290	Transistor	2SA1206	1	1
TR342	HTA0290	Transistor	2SA1206	1	1
TR381	HTC0814	Transistor	2SC3355	1	1
TR382	HTC0814	Transistor	2SC3355	1	1
TR391	HTA0290	Transistor	2SA1206	1	1
TR392	HTA0290	Transistor	2SA1206	1	1
TR417	HTC0192	Transistor	2SC641K-C	1	1
TR428	HTK0116	Transistor	2SK336	1	1
TR429	HTC0192	Transistor	2SC641K-C	1	1
TR430	HTC0192	Transistor	2SC641K-C	1	1
TR432	HTC0338	Transistor	2SC1906	1	1
TR434	HTC0338	Transistor	2SC1906	1	1
TR438	HTC0192	Transistor	2SC641K-C	1	1
TR449	HTC0768	Transistor	2SC2408	1	1
TR450	HTC0768	Transistor	2SC2408	1	1
TR459	HTC0338	Transistor	2SC1906	1	1
TR1503	HTD0126	Transistor	2SD1138-C	1	1
TR1516	HTC0669	Transistor	2SC2912S	1	1
D9	HDS0477	Diode	1SS110	1	1
D11	HDS0477	Diode	1SS110	1	1
D109	HDS0477	Diode	1SS110	1	1
D111	HDS0477	Diode	1SS110	1	1
D401	HDX0055	Diode	1SS165	1	1
D402	HDX0055	Diode	1SS165	1	1
D403	HDS0437	Diode	1SS133	1	1
D404	HDS0437	Diode	1SS133	1	1
D405	HDX0055	Diode	1SS165	1	1
D406	HDX0055	Diode	1SS165	1	1
D407	HDS0437	Diode	1SS133	1	1
D408	HDS0437	Diode	1SS133	1	1
D409	HDX0055	Diode	1SS165	1	1
D410	HDX0055	Diode	1SS165	1	1
D411	HDS0437	Diode	1SS133	1	1
D412	HDS0437	Diode	1SS133	1	1
D413	HDX0055	Diode	1SS165	1	1
D414	HDX0055	Diode	1SS165	1	1
D415	HDS0437	Diode	1SS133	1	1
D416	HDS0437	Diode	1SS133	1	1
D420	HDS0437	Diode	1SS133	1	1
D421	HDS0437	Diode	1SS133	1	1
D430	HDM0143	Diode	MTZ 15 JC	1	1
D433	HDS0437	Diode	1SS133	1	1
D438	HDM0143	Diode	MTZ 15 JC	1	1
D439	HDS0437	Diode	1SS133	1	1
D456	HDS0437	Diode	1SS133	1	1
D461	HDS0437	Diode	1SS133	1	1
D462	HDS0437	Diode	1SS133	1	1
D463	HDS0437	Diode	1SS133	1	1
D464	HDS0437	Diode	1SS133	1	1
D1240	HDS0437	Diode	1SS133	1	1
D1241	HDS0437	Diode	1SS133	1	1
D1242	HDS0437	Diode	1SS133	1	1
D1243	HDS0437	Diode	1SS133	1	1
D1290	HDS0437	Diode	1SS133	1	1
D1291	HDS0437	Diode	1SS133	1	1
D1292	HDS0437	Diode	1SS133	1	1
D1293	HDS0437	Diode	1SS133	1	1
D1501	HDD0138	Diode	DBA10C	1	1
D1502	HDH0195	Diode	HZS33EB4	1	1
D1503	HDM0144	Diode	MTZ 22 JD	1	1
D1504	HDS0437	Diode	1SS133	1	1
D1506	HDS0475	Diode	S5566B	1	1
D1510	HDM0140	Diode	MTZ 4.7 JB	1	1
D1511	HDD0138	Diode	DBA10C	1	1
D1512	HDM0140	Diode	MTZ 4.7 JB	1	1
D1513	HDS0437	Diode	1SS133	1	1
D1518	HDS0475	Diode	S5566B	1	1
D1527	HDS0475	Diode	S5566B	1	1
D1532	HDS0475	Diode	S5566B	1	1
D1533	HDS0437	Diode	1SS133	1	1
D1534	HDS0437	Diode	1SS133	1	1
D1536	HDS0475	Diode	S5566B	1	1
D1537	HDS0475	Diode	S5566B	1	1
D1542	HDH0214	Diode	HZ 6.8 BP	1	1
D1552	HDH0214	Diode	HZ 6.8 BP	1	1

PEF-675 V PREAMP, TIMING CKT, POWER SUPPLY

Symbol	Part Code	Description	Q'ty A	Q'ty B
D1555	HDS0437	Diode 1SS133	1	1
D2501	HDS0437	Diode 1SS133	1	1
D2504	HDS0437	Diode 1SS133	1	1
D2515	HDS0437	Diode 1SS133	1	1
D2544	HDS0437	Diode 1SS133	1	1
D2555	HDS0437	Diode 1SS133	1	1
D2581	HDS0437	Diode 1SS133	1	1
D2608	HDS0437	Diode 1SS133	1	1
D2613	HDS0437	Diode 1SS133	1	1
D2619	HDS0437	Diode 1SS133	1	1
D2715	HDS0437	Diode 1SS133	1	1
R8	RME1168	R, Metal 1/4W 500kΩ ±0.5%	1	1
R9	RME1168	R, Metal 1/4W 500kΩ ±0.5%	1	1
R10	RCE0753	R, Carbon 1/4W 47Ω ±5%	1	
R11	RSE0446	R, Solid 1/4W 22MΩ ±5%	1	1
R12	RCE0753	R, Carbon 1/4W 47Ω ±5%	1	1
R13	RCE0756	R, Carbon 1/4W 82Ω ±5%	1	1
R14	RME0876	R, Metal, Chip 1/8W 1.0kΩ ±5%	1	1
R15	RME0876	R, Metal, Chip 1/8W 1.0kΩ ±5%	1	1
R16	RCE0776	R, Carbon 1/4W 3.9kΩ ±5%	1	1
R17	RCE0768	R, Carbon 1/4W 820Ω ±5%	1	1
R18	RME0886	R, Metal, Chip 1/8W 6.8kΩ ±5%	1	1
R19	RME0886	R, Metal, Chip 1/8W 6.8kΩ ±5%	1	1
R20	RME0882	R, Metal, Chip 1/8W 3.3kΩ ±5%	1	1
R21	RCE0761	R, Carbon 1/4W 220Ω ±5%	1	1
R22	RCE0770	R, Carbon 1/4W 1.2kΩ ±5%	1	1
R23	RCE0755	R, Carbon 1/4W 68Ω ±5%	1	1
R24	RME1283	R, Metal 1/4W 6.00kΩ ±0.5%	1	1
R25	RME1068	R, Metal 1/4W 475Ω ±1%	1	1
R26	RME1283	R, Metal 1/4W 6.00kΩ ±0.5%	1	1
R27	RCE0756	R, Carbon 1/4W 82Ω ±5%	1	1
R28	RCE0798	R, Carbon 1/4W 330kΩ ±5%	1	1
R29	RCE0771	R, Carbon 1/4W 1.5kΩ ±5%	1	1
R30	RME1096	R, Metal 1/4W 100kΩ ±1%	1	
R35	RCE0774	R, Carbon 1/4W 2.7kΩ ±5%	1	1
R36	RCE0769	R, Carbon 1/4W 1kΩ ±5%	1	1
R37	RCE0802	R, Carbon 1/4W 1MΩ ±5%	1	1
R38	RCE0793	R, Carbon 1/4W 100kΩ ±5%	1	1
R40	RCE0749	R, Carbon 1/4W 22Ω ±5%	1	1
R41	RCE0749	R, Carbon 1/4W 22Ω ±5%	1	1
R44	RCE0802	R, Carbon 1/4W 1MΩ ±5%	1	1
R45	RCE0768	R, Carbon 1/4W 820Ω ±5%	1	1
R46	RME1371	R, Metal 1/4W 1.65kΩ ±1%	1	1
R47	RME1283	R, Metal 1/4W 6.00kΩ ±0.5%	1	1
R47C	RCE0777	R, Carbon 1/4W 4.7kΩ ±5%	1	1
R48	RME1284	R, Metal 1/4W 1.50kΩ ±0.5%	1	1
R49	RCE0761	R, Carbon 1/4W 220Ω ±5%	1	1
R50	RCE0795	R, Carbon 1/4W 150kΩ ±5%	1	1
R50A	RME1067	R, Metal 1/4W 392Ω ±1%	1	1
R50B	RME1063	R, Metal 1/4W 182Ω ±1%	1	1
R51	RME0852	R, Metal, Chip 1/8W 10Ω ±5%	1	1
R52	RME1066	R, Metal 1/4W 332Ω ±1%	1	1
R54	RCE0757	R, Carbon 1/4W 100Ω ±5%	1	1
R55	RME1076	R, Metal 1/4W 2.21kΩ ±1%	1	1
R56	RME1076	R, Metal 1/4W 2.21kΩ ±1%	1	1
R57	RME0860	R, Metal, Chip 1/8W 47Ω ±5%	1	1
R57B	RCE0765	R, Carbon 1/4W 470Ω ±5%	1	1
R58	RCE0743	R, Carbon 1/4W 4.7Ω ±5%	1	1
R60	RCE0781	R, Carbon 1/4W 10kΩ ±5%	1	1

Symbol	Part Code	Description	Q'ty A	Q'ty B
R61	RCE0753	R, Carbon 1/4W 47Ω ±5%	1	1
R63	RCE0753	R, Carbon 1/4W 47Ω ±5%	1	1
R64	RCE0753	R, Carbon 1/4W 47Ω ±5%	1	1
R65	RCE0766	R, Carbon 1/4W 560Ω ±5%	1	1
R66	RCE0766	R, Carbon 1/4W 560Ω ±5%	1	1
R71	RCE0775	R, Carbon 1/4W 3.3kΩ ±5%	1	1
R81	RME1116	R, Metal 1/4W 619Ω ±1%	1	1
R82	RME1116	R, Metal 1/4W 619Ω ±1%	1	1
R83	RCE0761	R, Carbon 1/4W 220Ω ±5%	1	1
R84	RCE0761	R, Carbon 1/4W 220Ω ±5%	1	1
R85	RCE0775	R, Carbon 1/4W 3.3kΩ ±5%	1	1
R86	RCE0769	R, Carbon 1/4W 1kΩ ±5%	1	1
R87	RCE0779	R, Carbon 1/4W 6.8kΩ ±5%	1	1
R88	RCE0761	R, Carbon 1/4W 220Ω ±5%	1	1
R90	RCE0753	R, Carbon 1/4W 47Ω ±5%	1	1
R91	RME1076	R, Metal 1/4W 2.21kΩ ±1%	1	1
R108	RME1168	R, Metal 1/4W 500kΩ ±0.5%	1	1
R109	RME1168	R, Metal 1/4W 500kΩ ±0.5%	1	1
R111	RSE0446	R, Solid 1/4W 22MΩ ±5%	1	1
R112	RCE0753	R, Carbon 1/4W 47Ω ±5%	1	1
R113	RCE0756	R, Carbon 1/4W 82Ω ±5%	1	1
R116	RCE0776	R, Carbon 1/4W 3.9kΩ ±5%	1	1
R117	RCE0768	R, Carbon 1/4W 820Ω ±5%	1	1
R118	RME0886	R, Metal, Chip 1/8W 6.8kΩ ±5%	1	1
R119	RME0886	R, Metal, Chip 1/8W 6.8kΩ ±5%	1	1
R120	RME0882	R, Metal, Chip 1/8W 3.3kΩ ±5%	1	1
R121	RCE0761	R, Carbon 1/4W 220Ω ±5%	1	1
R122	RCE0770	R, Carbon 1/4W 1.2kΩ ±5%	1	1
R123	RCE0755	R, Carbon 1/4W 68Ω ±5%	1	1
R124	RME1283	R, Metal 1/4W 6.00kΩ ±0.5%	1	1
R125	RME1068	R, Metal 1/4W 475Ω ±1%	1	1
R126	RME1283	R, Metal 1/4W 6.00kΩ ±0.5%	1	1
R127	RCE0756	R, Carbon 1/4W 82Ω ±5%	1	1
R128	RCE0798	R, Carbon 1/4W 330kΩ ±5%	1	1
R129	RCE0771	R, Carbon 1/4W 1.5kΩ ±5%	1	1
R130	RME1096	R, Metal 1/4W 100kΩ ±1%	1	
R132	RME1077	R, Metal 1/4W 2.67kΩ ±1%	1	1
R135	RCE0774	R, Carbon 1/4W 2.7kΩ ±5%	1	1
R136	RCE0769	R, Carbon 1/4W 1kΩ ±5%	1	1
R137	RCE0802	R, Carbon 1/4W 1MΩ ±5%	1	1
R138	RCE0793	R, Carbon 1/4W 100kΩ ±5%	1	1
R140	RCE0749	R, Carbon 1/4W 22Ω ±5%	1	1
R141	RCE0749	R, Carbon 1/4W 22Ω ±5%	1	1
R144	RCE0802	R, Carbon 1/4W 1MΩ ±5%	1	1
R145	RCE0768	R, Carbon 1/4W 820Ω ±5%	1	1
R146	RME1371	R, Metal 1/4W 1.65kΩ ±1%	1	1
R147	RME1283	R, Metal 1/4W 6.00kΩ ±0.5%	1	1
R147C	RCE0777	R, Carbon 1/4W 4.7kΩ ±5%	1	1
R148	RME1284	R, Metal 1/4W 1.50kΩ ±0.5%	1	1
R149	RCE0761	R, Carbon 1/4W 220Ω ±5%	1	1
R150	RCE0795	R, Carbon 1/4W 150kΩ ±5%	1	1
R150A	RME1067	R, Metal 1/4W 392Ω ±1%	1	1
R150B	RME1063	R, Metal 1/4W 182Ω ±1%	1	1
R151	RME0852	R, Metal, Chip 1/8W 10Ω ±5%	1	1
R152	RME1066	R, Metal 1/4W 332Ω ±1%	1	1
R153	RCE0755	R, Carbon 1/4W 68Ω ±5%	1	1
R154	RCE0757	R, Carbon 1/4W 100Ω ±5%	1	1
R155	RME1076	R, Metal 1/4W 2.21kΩ ±1%	1	1
R156	RME1076	R, Metal 1/4W 2.21kΩ ±1%	1	1
R157	RME0863	R, Metal, Chip 1/8W 82Ω ±5%	1	1

PEF-675 V PREAMP, TIMING CKT, POWER SUPPLY

Symbol	Part Code	Description				Q'ty A	Q'ty B
R157B	RCE0765	R, Carbon	1/4W	470Ω	±5%	1	1
R158	RCE0743	R, Carbon	1/4W	4.7Ω	±5%	1	1
R160	RCE0781	R, Carbon	1/4W	10kΩ	±5%	1	1
R161	RCE0753	R, Carbon	1/4W	47Ω	±5%	1	1
R163	RCE0753	R, Carbon	1/4W	47Ω	±5%	1	1
R164	RCE0753	R, Carbon	1/4W	47Ω	±5%	1	1
R165	RCE0766	R, Carbon	1/4W	560Ω	±5%	1	1
R166	RCE0766	R, Carbon	1/4W	560Ω	±5%	1	1
R171	RCE0775	R, Carbon	1/4W	3.3kΩ	±5%	1	1
R181	RME1116	R, Metal	1/4W	619Ω	±1%	1	1
R182	RME1116	R, Metal	1/4W	619Ω	±1%	1	1
R185	RCE0761	R, Carbon	1/4W	220Ω	±5%	1	1
R186	RCE0761	R, Carbon	1/4W	220Ω	±5%	1	1
R188	RCE0775	R, Carbon	1/4W	3.3kΩ	±5%	1	1
R189	RCE0775	R, Carbon	1/4W	3.3kΩ	±5%	1	1
R190	RCE0761	R, Carbon	1/4W	220Ω	±5%	1	1
R191	RCE0761	R, Carbon	1/4W	220Ω	±5%	1	1
R201	RCE0755	R, Carbon	1/4W	68Ω	±5%	1	1
R202	RCE0755	R, Carbon	1/4W	68Ω	±5%	1	1
R203	RCE0753	R, Carbon	1/4W	47Ω	±5%	1	1
R204	RCE0758	R, Carbon	1/4W	120Ω	±5%	1	1
R205	RME1078	R, Metal	1/4W	3.32kΩ	±1%	1	1
R206	RME1078	R, Metal	1/4W	3.32kΩ	±1%	1	1
R207	RME1056	R, Metal	1/4W	47.5Ω	±1%	1	1
R208	RME1056	R, Metal	1/4W	47.5Ω	±1%	1	1
R209	RCE0771	R, Carbon	1/4W	1.5kΩ	±5%	1	
R210	RCE0771	R, Carbon	1/4W	1.5kΩ	±5%	1	
R211	RCE0764	R, Carbon	1/4W	390Ω	±5%	1	1
R212	RCE0764	R, Carbon	1/4W	390Ω	±5%	1	1
R213	RME1067	R, Metal	1/4W	392Ω	±1%	1	1
R214	RME1067	R, Metal	1/4W	392Ω	±1%	1	1
R215	RME1121	R, Metal	1/4W	1.37kΩ	±1%	1	1
R216	RME1121	R, Metal	1/4W	1.37kΩ	±1%	1	1
R217	RME1061	R, Metal	1/4W	121Ω	±1%	1	1
R219	RCE0753	R, Carbon	1/4W	47Ω	±5%	1	1
R220	RCE0753	R, Carbon	1/4W	47Ω	±5%	1	1
R225	RCE0753	R, Carbon	1/4W	47Ω	±5%	1	
R226	RCE0753	R, Carbon	1/4W	47Ω	±5%	1	
R229	RME1058	R, Metal	1/4W	68.1Ω	±1%	1	
R230	RME1058	R, Metal	1/4W	68.1Ω	±1%	1	
R231	RCE0767	R, Carbon	1/4W	680Ω	±5%	1	
R232	RCE0767	R, Carbon	1/4W	680Ω	±5%	1	
R234	RCE0755	R, Carbon	1/4W	68Ω	±5%	1	1
R235	RCE0755	R, Carbon	1/4W	68Ω	±5%	1	1
R236	RCE0758	R, Carbon	1/4W	120Ω	±5%	1	1
R253	RCE0753	R, Carbon	1/4W	47Ω	±5%	1	1
R255	RME1078	R, Metal	1/4W	3.32kΩ	±1%	1	1
R256	RME1078	R, Metal	1/4W	3.32kΩ	±1%	1	1
R261	RCE0764	R, Carbon	1/4W	390Ω	±5%	1	1
R262	RCE0764	R, Carbon	1/4W	390Ω	±5%	1	1
R263	RME1067	R, Metal	1/4W	392Ω	±1%	1	1
R264	RME1067	R, Metal	1/4W	392Ω	±1%	1	1
R265	RME1121	R, Metal	1/4W	1.37kΩ	±1%	1	1
R266	RME1121	R, Metal	1/4W	1.37kΩ	±1%	1	1
R267	RME1061	R, Metal	1/4W	121Ω	±1%	1	1
R269	RCE0753	R, Carbon	1/4W	47Ω	±5%	1	1
R270	RCE0753	R, Carbon	1/4W	47Ω	±5%	1	1
R273	RME1056	R, Metal	1/4W	47.5Ω	±1%	1	1
R274	RME1056	R, Metal	1/4W	47.5Ω	±1%	1	1

Symbol	Part Code	Description				Q'ty A	Q'ty B
R332	RME1104	R, Metal	1/4W	51.1Ω	±1%	1	1
R332A	RME0856	R, Metal, Chip	1/8W	22Ω	±5%	1	1
R333	RME1076	R, Metal	1/4W	2.21kΩ	±1%	1	1
R334	RME1076	R, Metal	1/4W	2.21kΩ	±1%	1	1
R335	RCE0758	R, Carbon	1/4W	120Ω	±5%	1	1
R336	RCE0769	R, Carbon	1/4W	1kΩ	±5%	1	1
R337	RCE0783	R, Carbon	1/4W	15kΩ	±5%	1	1
R338	RCE0779	R, Carbon	1/4W	6.8kΩ	±5%	1	1
R339	RCE0757	R, Carbon	1/4W	100Ω	±5%	1	1
R341	RCE0766	R, Carbon	1/4W	560Ω	±5%	1	1
R342	RCE0766	R, Carbon	1/4W	560Ω	±5%	1	1
R343	RME1069	R, Metal	1/4W	562Ω	±1%	1	1
R344	RME1069	R, Metal	1/4W	562Ω	±1%	1	1
R345	RCE0748	R, Carbon	1/4W	18Ω	±5%	1	1
R346	RCE0761	R, Carbon	1/4W	220Ω	±5%	1	1
R347	RCE0757	R, Carbon	1/4W	100Ω	±5%	1	1
R349	RCE0757	R, Carbon	1/4W	100Ω	±5%	1	1
R382	RME1104	R, Metal	1/4W	51.1Ω	±1%	1	1
R382A	RME0857	R, Metal, Chip	1/8W	27Ω	±5%	1	1
R383	RME1076	R, Metal	1/4W	2.21kΩ	±1%	1	1
R384	RME1076	R, Metal	1/4W	2.21kΩ	±1%	1	1
R385	RCE0758	R, Carbon	1/4W	120Ω	±5%	1	1
R386	RCE0769	R, Carbon	1/4W	1kΩ	±5%	1	1
R387	RCE0783	R, Carbon	1/4W	kΩ	±5%	1	1
R388	RCE0779	R, Carbon	1/4W	6.8kΩ	±5%	1	1
R389	RCE0757	R, Carbon	1/4W	100Ω	±5%	1	1
R391	RCE0766	R, Carbon	1/4W	560Ω	±5%	1	1
R392	RCE0766	R, Carbon	1/4W	560Ω	±5%	1	1
R393	RME1069	R, Metal	1/4W	562Ω	±1%	1	1
R394	RME1069	R, Metal	1/4W	562Ω	±1%	1	1
R395	RCE0748	R, Carbon	1/4W	18Ω	±5%	1	1
R396	RCE0761	R, Carbon	1/4W	220Ω	±5%	1	1
R397	RCE0757	R, Carbon	1/4W	100Ω	±5%	1	1
R399	RCE0757	R, Carbon	1/4W	100Ω	±5%	1	1
R401	RCE0753	R, Carbon	1/4W	47Ω	±5%	1	1
R402	RCE0753	R, Carbon	1/4W	47Ω	±5%	1	1
R403	RCE0753	R, Carbon	1/4W	47Ω	±5%	1	1
R404	RCE0753	R, Carbon	1/4W	47Ω	±5%	1	1
R405	RCE0769	R, Carbon	1/4W	1kΩ	±5%	1	1
R406	RME0862	R, Metal, Chip	1/8W	68Ω	±5%	1	1
R407	RME0862	R, Metal, Chip	1/8W	68Ω	±5%	1	1
R408	RME0862	R, Metal, Chip	1/8W	68Ω	±5%	1	1
R409	RME0862	R, Metal, Chip	1/8W	68Ω	±5%	1	1
R411	RCE0749	R, Carbon	1/4W	22Ω	±5%	1	1
R413	RCE0752	R, Carbon	1/4W	39Ω	±5%	1	1
R414	RCE0752	R, Carbon	1/4W	39Ω	±5%	1	1
R415	RCE0761	R, Carbon	1/4W	220Ω	±5%	1	1
R416	RCE0781	R, Carbon	1/4W	10kΩ	±5%	1	1
R417	RCE0781	R, Carbon	1/4W	10kΩ	±5%	1	1
R418	RCE0777	R, Carbon	1/4W	4.7kΩ	±5%	1	1
R419	RME0860	R, Metal, Chip	1/8W	47Ω	±5%	1	1
R420	RME0860	R, Metal, Chip	1/8W	47Ω	±5%	1	1
R421	RCE0769	R, Carbon	1/4W	1kΩ	±5%	1	1
R422	RCE0753	R, Carbon	1/4W	47Ω	±5%	1	1
R423	RCE0769	R, Carbon	1/4W	1kΩ	±5%	1	1
R424	RCE0753	R, Carbon	1/4W	47Ω	±5%	1	1
R425	RCE0777	R, Carbon	1/4W	4.7kΩ	±5%	1	1
R426	RCE0783	R, Carbon	1/4W	15kΩ	±5%	1	1

PEF-675 V PREAMP, TIMING CKT, POWER SUPPLY

Symbol	Part Code	Description				Q'ty A	Q'ty B
R427	RCE0769	R, Carbon	1/4W	1kΩ	±5%	1	1
R428	RCE0765	R, Carbon	1/4W	470Ω	±5%	1	1
R429	RCE0773	R, Carbon	1/4W	2.2kΩ	±5%	1	1
R430	RCE0773	R, Carbon	1/4W	2.2kΩ	±5%	1	1
R431	RME1071	R, Metal	1/4W	825Ω	±1%	1	1
R432	RCE0761	R, Carbon	1/4W	220Ω	±5%	1	1
R433	RCE0781	R, Carbon	1/4W	10kΩ	±5%	1	1
R434	RCE0761	R, Carbon	1/4W	220Ω	±5%	1	1
R435	RME1068	R, Metal	1/4W	475Ω	±1%	1	1
R436	RME1174	R, Metal	1/4W	2.00kΩ	±1%	1	1
R437	RME1174	R, Metal	1/4W	2.00kΩ	±1%	1	1
R438	RCE0773	R, Carbon	1/4W	2.2kΩ	±5%	1	1
R439	RCE0781	R, Carbon	1/4W	10kΩ	±5%	1	1
R440	RME1058	R, Metal	1/4W	68.1Ω	±1%	1	1
R441	RCE0755	R, Carbon	1/4W	68Ω	±5%	1	1
R442	RCE0755	R, Carbon	1/4W	68Ω	±5%	1	1
R443	RME1221	R, Metal	1/4W	1.37kΩ	±1%	1	1
R444	RME1221	R, Metal	1/4W	1.37kΩ	±1%	1	1
R445	RME1072	R, Metal	1/4W	1.00kΩ	±1%	1	1
R446	RME1072	R, Metal	1/4W	1.00kΩ	±1%	1	1
R447	RME1072	R, Metal	1/4W	1.00kΩ	±1%	1	1
R448	RCE0751	R, Carbon	1/4W	33Ω	±5%	1	1
R449	RME1064	R, Metal	1/4W	221Ω	±1%	1	1
R450	RME1064	R, Metal	1/4W	221Ω	±1%	1	1
R451	RME1221	R, Metal	1/4W	1.37kΩ	±1%	1	1
R452	RME1221	R, Metal	1/4W	1.37kΩ	±1%	1	1
R453	RME1052	R, Metal	1/4W	22.1Ω	±1%	1	1
R454	RME1052	R, Metal	1/4W	22.1Ω	±1%	1	1
R455	RME1056	R, Metal	1/4W	47.5Ω	±1%	1	1
R457	RCE0743	R, Carbon	1/4W	4.7Ω	±5%	1	1
R458	RME1064	R, Metal	1/4W	221Ω	±1%	1	1
R459	RCE0753	R, Carbon	1/4W	47Ω	±5%	1	1
R460	RCE0793	R, Carbon	1/4W	100kΩ	±5%	1	1
R461	RME1056	R, Metal	1/4W	47.5Ω	±1%	1	1
R462	RCE0789	R, Carbon	1/4W	47kΩ	±5%	1	1
R463	RCE0789	R, Carbon	1/4W	47kΩ	±5%	1	1
R464	RCE0789	R, Carbon	1/4W	47kΩ	±5%	1	1
R466	RCE0773	R, Carbon	1/4W	2.2kΩ	±5%	1	1
R467	RCE0789	R, Carbon	1/4W	47kΩ	±5%	1	1
R468	RCE0767	R, Carbon	1/4W	680Ω	±5%	1	1
R470	RCE0749	R, Carbon	1/4W	22Ω	±5%	1	1
R1481	RCE0785	R, Carbon	1/4W	22kΩ	±5%	1	1
R1483	RME0864	R, Metal, Chip	1/8W	100Ω	±5%	1	1
R1501	RZZ0040	R, Fusing	1/4W	22Ω	±5%	1	1
R1502	RCE0777	R, Carbon	1/4W	4.7kΩ	±5%	1	1
R1503	RME1366	R, Metal	2W	2.2kΩ	±5%	1	1
R1504	RCE0777	R, Carbon	1/4W	4.7kΩ	±5%	1	1
R1510	RCE0793	R, Carbon	1/4W	100kΩ	±5%	1	1
R1512	RMR2803	R, Metal	1W	4.7kΩ	±5%	1	1
R1514	RCE0787	R, Carbon	1/4W	33kΩ	±5%	1	1
R1515	RCE0781	R, Carbon	1/4W	10kΩ	±5%	1	1
R1516	RCE0773	R, Carbon	1/4W	2.2kΩ	±5%	1	1
R1517	RCE0769	R, Carbon	1/4W	1kΩ	±5%	1	1
R1518	RME1207	R, Metal	1/4W	75.0kΩ	±1%	1	1
R1519	RME1212	R, Metal	1/4W	20.0kΩ	±0.5%	1	1
R1521	RCE0785	R, Carbon	1/4W	22kΩ	±5%	1	1
R1523	RCE0773	R, Carbon	1/4W	2.2kΩ	±5%	1	1
R1524	RME1362	R, Metal	2W	0.47Ω	±5%	1	1
R1525	RME1210	R, Metal	1/4W	4.43kΩ	±0.5%	1	1
R1526	RME0674	R, Metal	1/4W	6.81kΩ	±1%	1	1
R1527	RME1212	R, Metal	1/4W	20.0kΩ	±0.5%	1	1
R1532	RME1212	R, Metal	1/4W	20.0kΩ	±0.5%	1	1

Symbol	Part Code	Description				Q'ty A	Q'ty B
R1534	RCE0767	R, Carbon	1/4W	680Ω	±5%	1	1
R1536	RCE0785	R, Carbon	1/4W	22kΩ	±5%	1	1
R1546	RCE0793	R, Carbon	1/4W	100kΩ	±5%	1	1
R1547	RCE0781	R, Carbon	1/4W	10kΩ	±5%	1	1
R1548	RCE0781	R, Carbon	1/4W	10kΩ	±5%	1	1
R1551	RCE0767	R, Carbon	1/4W	680Ω	±5%	1	1
R1552	RME1082	R, Metal	1/4W	6.81kΩ	±1%	1	1
R1553	RME1212	R, Metal	1/4W	20.0kΩ	±0.5%	1	1
R1554	RME1074	R, Metal	1/4W	1.50kΩ	±1%	1	1
R1555	RCE0767	R, Carbon	1/4W	680Ω	±5%	1	1
R2500	RME0876	R, Metal, Chip	1/8W	1kΩ	±5%	1	1
R2501	RCE0833	R, Carbon	1/4W	240kΩ	±5%	1	1
R2503	RME1162	R, Metal	1/4W	80.0kΩ	±0.5%	1	1
R2504	RME1162	R, Metal	1/4W	80.0kΩ	±0.5%	1	1
R2505	RCE0769	R, Carbon	1/4W	1kΩ	±5%	1	1
R2506	RME0876	R, Metal, Chip	1/8W	1kΩ	±5%	1	
R2507	RCE0769	R, Carbon	1/4W	1kΩ	±5%	1	
R2508	RCE0769	R, Carbon	1/4W	1kΩ	±5%	1	
R2509	RCE0769	R, Carbon	1/4W	1kΩ	±5%	1	
R2510	RCE0785	R, Carbon	1/4W	22kΩ	±5%	1	
R2511	RCE0793	R, Carbon	1/4W	100kΩ	±5%	1	1
R2512	RCE0815	R, Carbon	1/4W	200kΩ	±5%	1	1
R2513	RCE0833	R, Carbon	1/4W	240kΩ	±5%	1	1
R2514	RME1097	R, Metal	1/4W	121kΩ	±1%	1	1
R2515	RME1162	R, Metal	1/4W	80.0kΩ	±0.5%	1	1
R2516	RME1208	R, Metal	1/4W	200kΩ	±1%	1	1
R2517	RCE0769	R, Carbon	1/4W	1kΩ	±5%	1	1
R2541	RCE0800	R, Carbon	1/4W	470kΩ	±5%	1	1
R2543	RME1162	R, Metal	1/4W	80.0kΩ	±0.5%	1	1
R2544	RME1162	R, Metal	1/4W	80.0kΩ	±0.5%	1	1
R2545	RME0876	R, Metal, Chip	1/8W	1kΩ	±5%	1	1
R2550	RCE0785	R, Carbon	1/4W	22kΩ	±5%	1	
R2551	RCE0815	R, Carbon	1/4W	200kΩ	±5%	1	1
R2552	RCE0793	R, Carbon	1/4W	100kΩ	±5%	1	1
R2553	RCE0833	R, Carbon	1/4W	240kΩ	±5%	1	1
R2554	RME1097	R, Metal	1/4W	121kΩ	±1%	1	1
R2555	RME1162	R, Metal	1/4W	80.0kΩ	±0.5%	1	1
R2556	RME1208	R, Metal	1/4W	200kΩ	±1%	1	1
R2557	RCE0769	R, Carbon	1/4W	1kΩ	±5%	1	1
R2602	RME1097	R, Metal	1/4W	121kΩ	±1%	1	1
R2605	RCE0800	R, Carbon	1/4W	470kΩ	±5%	1	1
R2606	RME1097	R, Metal	1/4W	121kΩ	±1%	1	1
R2607	RCE0833	R, Carbon	1/4W	240kΩ	±5%	1	1
R2608	RME1208	R, Metal	1/4W	200kΩ	±1%	1	1
R2611	RME1097	R, Metal	1/4W	121kΩ	±1%	1	1
R2612	RCE0833	R, Carbon	1/4W	240kΩ	±5%	1	1
R2613	RCE0800	R, Carbon	1/4W	470kΩ	±5%	1	1
R2615	RME1162	R, Metal	1/4W	80.0kΩ	±0.5%	1	1
R2616	RME1097	R, Metal	1/4W	121kΩ	±1%	1	1
R2617	RCE0833	R, Carbon	1/4W	240kΩ	±5%	1	1
R2619	RCE0800	R, Carbon	1/4W	470kΩ	±5%	1	1
R2625	RCE0789	R, Carbon	1/4W	47kΩ	±5%	1	1
R2626	RCE0789	R, Carbon	1/4W	47kΩ	±5%	1	1
R2631	RCE0789	R, Carbon	1/4W	47kΩ	±5%	1	1
R2632	RCE0789	R, Carbon	1/4W	47kΩ	±5%	1	1
R2720	RCE0769	R, Carbon	1/4W	1kΩ	±5%	1	1
R2721	RCE0753	R, Carbon	1/4W	47Ω	±5%	1	1
R2722	RCE0769	R, Carbon	1/4W	1kΩ	±5%	1	1
R2723	RCE0833	R, Carbon	1/4W	240kΩ	±5%	1	1
R2724	RME1096	R, Metal	1/4W	100kΩ	±1%	1	1
R2725	RME1162	R, Metal	1/4W	80.0kΩ	±0.5%	1	1
RT57	HDF0058	Thermistor	ERT-D2ZHK332S			1	1

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Stmbol	Part Code	Description	Q'ty A	Q'ty B
RT157	HDE0058	Thermistor ERT-D2ZHK332S	1	1
RM40	3184279	R, Network For 2nd ATT	1	1
RM140	3184279	R, Network For 2nd ATT	1	1
RV28	RNE0053	VR, Metal EVN 39C00YB24 (20K)	1	1
RV44	RNE0053	VR, Metal EVN 39C00YB24 (20K)	1	1
RV45	RNE0050	VR, Metal EVN 39C00YB52 (500)	1	1
RV46	RNE0050	VR, Metal EVN 39C00YB52 (500)	1	1
RV58	RNE0049	VR, Metal EVN 39C00YB12 (100)	1	1
RV60	RNE0053	VR, Metal EVN 39C00YB24 (20K)	1	1
RV128	RNE0053	VR, Metal EVN 39C00YB24 (20K)	1	1
RV144	RNE0053	VR, Metal EVN 39C00YB24 (20K)	1	1
RV145	RNE0050	VR, Metal EVN 39C00YB52 (500)	1	1
RV146	RNE0050	VR, Metal EVN 39C00YB52 (500)	1	1
RV153	RNE0049	VR, Metal EVN 39C00YB12 (100)	1	1
RV158	RNE0049	VR, Metal EVN 39C00YB12 (100)	1	1
RV160	RNE0053	VR, Metal EVN 39C00YB24 (20K)	1	1
RV335	RNE0049	VR, Metal EVN 39C00YB12 (100)	1	1
RV337	RNE0053	VR, Metal EVN 39C00YB24 (20K)	1	1
RV385	RNE0049	VR, Metal EVN 39C00YB12 (100)	1	1
RV387	RNE0053	VR, Metal EVN 39C00YB24 (20K)	1	1
RV1481	RNE0054	VR, Metal EVN 39C00YB15 (100K)	1	1
RV1482	RNE0054	VR, Metal EVN 39C00YB15 (100K)	1	1
RV1525	RNE0058	VR, Metal EVN 39C00YB13 (1K)	1	1
C11	CCD0286	C, Ceramic 500V 1000 pF +100 -0 %	1	1
C12	CCG0211	C, Ceramic Chip 50V 0.01 μF ±10%	1	1
C13	CCC1034	C, Ceramic 50V 68 pF ±5%	1	1
C14	CCC1007	C, Ceramic 50V 22 pF ±5%	1	1
C15	CES0133	C, AL Elyc 16V 47 μF ±20%	1	
C17	CES0133	C, AL Elyc 16V 47 μF ±20%	1	1
C18	CCG0209	C, Ceramic Chip 50V 4700 pF ±10%	1	1
C20	CCG0211	C, Ceramic Chip 50V 0.01 μF ±10%	1	1
C23	CCC1182	C, Ceramic 50V 1000 pF ±10%	1	1
C25	CCG0205	C, Ceramic Chip 50V 1000 pF ±10%	1	1
C28	CCG0211	C, Ceramic Chip 50V 0.01 μF ±10%	1	1
C29	CCC1002	C, Ceramic 50V 10 pF ±0.5pF	1	1
C30	CQA0124	C, Plastic 50V 0.01 μF ±10%	1	
C36	CEX0189	C, AL Elyc 16V 10μF(BP)±20%	1	1
C37	CQA0124	C, Plastic 50V 0.10μF ±10%	1	1
C38	CES0133	C, AL Elyc 16V 47 μF ±20%	1	1
C39	CES0133	C, AL Elyc 16V 47 μF ±20%	1	1
C40	CCG0211	C, Ceramic Chip 50V 0.01 μF ±10%	1	1
C41	CCC1030	C, Ceramic 50V 10000 pF +80 -20 %	1	1
C42	CCC1030	C, Ceramic 50V 10000 pF +80 -20 %	1	1
C43	CCC0999	C, Ceramic 50V 5 pF ±0.25pF	1	1
C43A	CCG0211	C, Ceramic Chip 50V 0.01 μF ±10%	1	1
C44	CCC1030	C, Ceramic 50V 10000 pF +80 -20 %	1	1
C47	CCG0205	C, Ceramic Chip 50V 1000 pF ±10%	1	1
C49	CCC1000	C, Ceramic 50V 7 pF ±0.5pF	1	1
C51	CCC1007	C, Ceramic 50V 22 pF ±5%	1	1
C54	CCC0999	C, Ceramic 50V 5 pF ±0.25pF	1	1
C55	CES0133	C, AL Elyc 16V 47 μF ±20%	1	1
C59	CCC0997	C, Ceramic 50V 3 pF ±0.25pF	1	1
C60	CCC1182	C, Ceramic 50V 1000 pF ±10%	1	1
C61	CCC1182	C, Ceramic 50V 1000 pF ±10%	1	1
C62	CCC0999	C, Ceramic 50V 5 pF ±0.25pF	1	1

Symbol	Part Code	Description	Q'ty A	Q'ty B
C63	CCC1365	C, Ceramic 50V 680 pF ±10%	1	1
C64	CCC1365	C, Ceramic 50V 680 pF ±10%	1	1
C83	CCC1030	C, Ceramic 50V 10000 pF +80 -20 %	1	1
C87	CCC1030	C, Ceramic 50V 10000 pF +80 -20 %	1	1
C88	CCC1030	C, Ceramic 50V 10000 pF +80 -20 %	1	1
C89	CCC1011	C, Ceramic 50V 33 pF ±5%	1	1
C111	CCD0286	C, Ceramic 500V 1000 pF +100 - %	1	1
C112	CCG0211	C, Ceramic Chip 50V 0.01 μF ±10%	1	1
C113	CCC1034	C, Ceramic 50V 68 pF ±5%	1	1
C114	CCC1007	C, Ceramic 50V 22 pF ±5%	1	1
C118	CCG0209	C, Ceramic Chip 50V 4700 pF ±10%	1	1
C120	CCG0211	C, Ceramic Chip 50V 0.01 μF ±10%	1	1
C123	CCC1182	C, Ceramic 50V 1000 pF ±10%	1	1
C125	CCG0205	C, Ceramic Chip 50V 1000 pF ±10%	1	1
C128	CCG0211	C, Ceramic Chip 50V 0.01 μF ±10%	1	1
C129	CCC1002	C, Ceramic 50V 10 pF ±0.5pF	1	1
C130	CQA0124	C, Plastic 50V 0.10 μF ±10%	1	
C132	CCG0126	C, Ceramic Chip 50V 12 pF ±5%	1	1
C136	CEX0189	C, AL Elyc 16V 10μF(BP)±20%	1	1
C137	CQA0124	C, Plastic 50V 0.10μF ±10%	1	1
C138	CES0133	C, AL Elyc 16V 47 μF ±20%	1	1
C139	CES0133	C, AL Elyc 16V 47 μF ±20%	1	1
C140	CCG0211	C, Ceramic Chip 50V 0.01 μF ±10%	1	1
C141	CCG0211	C, Ceramic Chip 50V 0.01 μF ±10%	1	1
C142	CCG0211	C, Ceramic Chip 50V 0.01 μF ±10%	1	1
C143A	CCG0211	C, Ceramic Chip 50V 0.01 μF ±10%	1	1
C144	CCC1030	C, Ceramic 50V 10000 pF +80 -20 %	1	1
C147	CCG0205	C, Ceramic Chip 50V 1000 pF ±10%	1	1
C149	CCC1000	C, Ceramic 50V 7 pF ±0.5pF	1	1
C151	CCC1007	C, Ceramic 50V 22 pF ±5%	1	1
C154	CCC0999	C, Ceramic 50V 5 pF ±0.25pF	1	1
C155	CES0133	C, AL Elyc 16V 47 μF ±20%	1	1
C159	CCC0997	C, Ceramic 50V 3 pF ±0.25pF	1	1
C160	CCC1182	C, Ceramic 50V 1000 pF ±10%	1	1
C161	CCC1182	C, Ceramic 50V 1000 pF ±10%	1	1
C162	CCC0999	C, Ceramic 50V 5 pF ±0.25pF	1	1
C163	CCC1365	C, Ceramic 50V 680 pF ±10%	1	1
C164	CCC1365	C, Ceramic 50V 680 pF ±10%	1	1
C187	CES0133	C, AL Elyc 16V 47 μF ±20%	1	1
C190	CCC1030	C, Ceramic 50V 10000 pF +80 -20 %	1	1
C191	CCC1030	C, Ceramic 50V 10000 pF +80 -20 %	1	1
C204	CCC0997	C, Ceramic 50V 3 pF ±0.25%	1	1
C207	CCG0132	C, Ceramic Chip 50V 22 pF ±5%	1	1
C208	CCG0132	C, Ceramic Chip 50V 22 pF ±5%	1	1
C211	CCC1364	C, Ceramic 50V 330 pF ±10%	1	1
C212	CCC1364	C, Ceramic 50V 330 pF ±10%	1	1
C218	CCC1030	C, Ceramic 50V 10000 pF +80 -20 %	1	1
C231	CCC1356	C, Ceramic 50V 470 pF ±10%	1	
C232	CCC1356	C, Ceramic 50V 470 pF ±10%	1	

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Symbol	Part Code	Description	Q'ty A	Q'ty B
C254	CCC0997	C, Ceramic 50V 3 pF ±0.25pF	1	1
C261	CCC1364	C, Ceramic 50V 330 pF ±10%	1	1
C262	CCC1364	C, Ceramic 50V 330 pF ±10%	1	1
C268	CES0133	C, AL Elyc 16V 47 µF ±20%	1	1
C273	CCG0132	C, Ceramic Chip 50V 22 pF ±5%	1	1
C335	CCG0122	C, Ceramic Chip 50V 8 pF ±0.5pF	1	1
C336	CCG0124	C, Ceramic Chip 50V 10 pF ±0.5pF	1	1
C336B	CCG0116	C, Ceramic Chip 50V 2 pF ±0.25pF	1	1
C341	CCC1365	C, Ceramic 50V 680 pF ±10%	1	1
C342	CCC1365	C, Ceramic 50V 680 pF ±10%	1	1
C345	CES0133	C, AL Elyc 16V 47 µF ±20%	1	1
C346	CES0133	C, AL Elyc 16V 47 µF ±20%	1	1
C385	CCG0122	C, Ceramic Chip 50V 8 pF ±0.5pF	1	1
C386	CCG0124	C, Ceramic Chip 50V 10 pF ±0.5pF	1	1
C386B	CCG0117	C, Ceramic Chip 50V 3 pF ±5%	1	1
C391	CCC1365	C, Ceramic 50V 680 pF ±10%	1	1
C392	CCC1365	C, Ceramic 50V 680 pF ±10%	1	1
C395	CES0133	C, AL Elyc 16V 47 µF ±20%	1	1
C396	CES0133	C, AL Elyc 16V 47 µF ±20%	1	1
C401	CCC1007	C, Ceramic 50V 22 pF ±5%	1	1
C402	CCC1007	C, Ceramic 50V 22 pF ±5%	1	1
C403	CCC1007	C, Ceramic 50V 22 pF ±5%	1	1
C404	CCC1007	C, Ceramic 50V 22 pF ±5%	1	1
C405	CCC1030	C, Ceramic 50V 10000 pF +80 -20%	1	1
C406	CCC1007	C, Ceramic 50V 22 pF ±5%	1	1
C407	CCC1007	C, Ceramic 50V 22 pF ±5%	1	1
C408	CCC1007	C, Ceramic 50V 22 pF ±5%	1	1
C409	CCC1007	C, Ceramic 50V 22 pF ±5%	1	1
C411	CCC0997	C, Ceramic 50V 3 pF ±0.25pF	1	1
C413	CCC1004	C, Ceramic 50V 15 pF ±5%	1	1
C414	CCC1004	C, Ceramic 50V 15 pF ±5%	1	1
C420	CCG0143	C, Ceramic Chip 50V 100 pF ±5%	1	1
C422	CCG0143	C, Ceramic Chip 50V 100 pF ±5%	1	1
C424	CCC1025	C, Ceramic 50V 100 pF ±10%	1	1
C425	CCC1004	C, Ceramic 50V 15 pF ±5%	1	1
C426	CCC1025	C, Ceramic 50V 100 pF ±10%	1	1
C431	CES0133	C, AL Elyc 16V 47 µF ±20%	1	1
C434	CCC1025	C, Ceramic 50V 100 pF ±10%	1	1
C440	CCC1007	C, Ceramic 50V 22 pF ±5%	1	1
C445	CES0133	C, AL Elyc 16V 47 µF ±20%	1	1
C450	CES0133	C, AL Elyc 16V 47 µF ±20%	1	1
C455	CCG0199	C, Ceramic Chip 50V 330 pF ±5%	1	1
C456	CCG0201	C, Ceramic Chip 50V 470 pF ±5%	1	1
C457	CES0133	C, AL Elyc 16V 47 µF ±20%	1	1
C459	CCC1002	C, Ceramic 50V 10 pF ±0.5pF	1	1
C470	CES0133	C, AL Elyc 16V 47 µF ±20%	1	1
C1480	CCC1030	C, Ceramic 50V 10000 pF +80 -20%	1	1
C1481	CCD0287	C, Ceramic 500V 4700 pF +100 -0%	1	1
C1482	CCD0287	C, Ceramic 500V 4700 pF +100 -0%	1	1
C1483	CCC1030	C, Ceramic 50V 10000 pF +80 -20%	1	1
C1501	CEK0107FY	C, AL Elyc 100V 220 µF ±20%	1	1
C1502	CCD0288	C, Ceramic 500V 10000 pF +100 -0%	1	1
C1505	CES0050FY	C, AL Elyc 100V 10 µF ±20%	1	1
C1511	CEK0106FY	C, AL Elyc 100V 330 µF ±20%	1	1

Symbol	Part Code	SDescription	Q'ty A	Q'ty B
C1512	CCD0288	C, Ceramic 500V 10000 pF +100 -0%	1	1
C1517	CQA0062	C, Plastic 100V 0.047 µF ±10%	1	1
C1518	CES0050FY	C, AL Elyc 100V 10 µF ±20%	1	1
C1520	CCC1030	C, Ceramic 50V 10000 pF +80 -20%	1	1
C1521	CEK0108FY	C, AL Elyc 25V 2200 µF ±20%	1	1
C1523	CES0133	C, AL Elyc 16V 47 µF ±20%	1	1
C1524	CCC1026	C, Ceramic 50V 150 pF ±10%	1	1
C1525	CES0133	C, AL Elyc 16V 47 µF ±20%	1	1
C1530	CCC1030	C, Ceramic 50V 10000 pF +80 -20%	1	1
C1531	CEK0108FY	C, AL Elyc 25V 2200 µF ±20%	1	1
C1532	CES0133	C, AL Elyc 16V 47 µF ±20%	1	1
C1533	CCC1182	C, Ceramic 50V 1000 pF ±10%	1	1
C1536	CEK0109FY	C, AL Elyc 25V 1000 µF ±20%	1	1
C1541	CEK0110FY	C, AL Elyc 16V 3300 µF ±20%	1	1
C1542	CES0133	C, AL Elyc 16V 47 µF ±20%	1	1
C1543	CCC1030	C, Ceramic 50V 10000 pF +80 -20%	1	1
C1546	CQA0127	C, Plastic 50V 0.01 µF ±10%	1	1
C1551	CEK0110FY	C, AL Elyc 16V 3300 µF ±20%	1	1
C1552	CES0133	C, AL Elyc 16V 47 µF ±20%	1	1
C1553	CCC1182	C, Ceramic 50V 1000 pF ±10%	1	1
C2500	CCG0205	C, Ceramic Chip 50V 1000 pF ±10%	1	1
C2510	CCC1030	C, Ceramic 50V 10000 pF +80 -20%	1	
C2512	CCG0205	C, Ceramic Chip 50V 1000 pF ±10%	1	
C2544	CCC1182	C, Ceramic 50V 1000 pF ±10%	1	1
C2550	CES0133	C, AL Elyc 16V 47 µF ±20%	1	1
C2551	CCC1030	C, Ceramic 50V 10000 pF +80 -20%	1	
C2552	CCG0205	C, Ceramic Chip 50V 1000 pF ±10%	1	
C2553	CCC1182	C, Ceramic 50V 1000 pF ±10%	1	1
C2555	CCC1182	C, Ceramic 50V 1000 pF ±10%	1	1
C2591	CCG0205	C, Ceramic Chip 50V 1000 pF ±10%	1	1
C2592	CCG0205	C, Ceramic Chip 50V 1000 pF ±10%	1	1
C2702	CCC1030	C, Ceramic 50V 10000 pF +80 -20%	1	1
CV58	CVE0046	C, Variable ECR-HA010A11	1	1
CV158	CVE0046	C, Variable ECR-HA010A11	1	1
CV336	CVE0046	C, Variable ECR-HA010A11	1	1
CV386	CVE0046	C, Variable ECR-HA010A11	1	1
L38	TLE0120	Coil ELE-Y 6R8 KA	1	1
L39	TLE0120	Coil ELE-Y 6R8 KA	1	1
L47	TLF0003	Coil FL-3H R22M	1	1
L138	TLE0120	Coil ELE-Y 6R8 KA	1	1
L139	TLE0120	Coil ELE-Y 6R8 KA	1	1
L147	TLF0003	Coil FL-3H R22M	1	1
L405	TLE0058	Coil EL0606R-100K	1	1
L421	TLE0058	Coil EL0606R-100K	1	1
L423	TLE0058	Coil EL0606R-100K	1	1
L427	TLE0058	Coil EL0606R-100K	1	1
L2506	TLE0120	Coil ELE-Y 6R8 KA	1	
S4	8410388	SW, Rotary ADR-255C100B28R10PY01	1	1
S104	8410388	SW, Rotary ADR-255C100B28R10PY01	1	1
S701	8410389	SW, Rotary SRS-Type For Timing	1	1
P1	JBB0027	Connector B2B-XH-A	1	
P4	JBB0022	Connector B6B-XH-A	1	1

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Symbol	Part Code	Description	Q'ty A	Q'ty B
P5	JBB0028	Connector B4B-XH-A	1	
P70	JBC0098	Card Fit Conn. CF-013	1	1
P223	JBB0028	Connector B4B-XH-A	1	
P331	JBC0099	Card Fit Conn. CF-015	1	1
P332	JBB0027	Connector B2B-XH-A	1	1
P382	JBB0027	Connector B2B-XH-A	1	1
P429	JBB0026	Connector B10B-XH-A	1	1
P465	JBC0097	Card Fit Conn. CF-011	1	1
P480	JBB0030	Connector B4P-SHF-GB	1	1
P710	JBB0032	Connector B14P-SHF-GB	1	1
P760	JBB0032	Connector B14P-SHF-GB	1	1
P1211	JBB0023	Connector B8B-XH-A	1	1
P1220	JBC0100	Card Fit Conn. CF-017	1	1
P1325	JBB0055	Connector B7P-SHF-GB	1	1
P1326	JBB0055	Connector B7P-SHF-GB	1	1
P1327	JBB0055	Connector B7P-SHF-GB	1	1
P1482	JBB0028	Connector B4B-XH-A	1	1
P1501	JBX0703	Connector 1-171825-0	1	1
P1521	JBB0026	Connector B10B-XH-A	1	1
P1541	JBB0022	Connector B6B-XH-A	1	1
P2100	JBC0101	Card Fit Conn. CF-019	1	1
F1511	EFI0002	IC Protector ICP-F10 (0.4A)	1	1
F1543	EFI0003	IC Protector ICP-F75 (2.7A)	1	1
TR225	HTC0338	Transistor 2SC1906	1	
TR226	HTC0338	Transistor 2SC1906	1	
R7	RCE0749	R, Carbon 1/4W 22Ω ±5%		1
R32	RME1077	R, Metal 1/4W 2.67kΩ ±1%	1	1
R107	RCE0749	R, Carbon 1/4W 22Ω ±5%		1
R336B	RME0888	R, Metal, Chip 1/8W 10kΩ ±5%	1	1
R342B	RME0912	R, Metal, Chip Zero Ohm Resistor	1	1
R386B	RME0886	R, Metal, Chip 1/8W 6.8kΩ ±5%	1	1
R392B	RME0912	R, Metal, Chip Zero Ohm Resistor	1	1
C7	CCC1004	C, Ceramic 50V 15pF ±5%		1
C19	CES0133	C, AL Elyc 16V 47μF ±20%	1	1
C32	CCG0126	C, Ceramic Chip 50V 12pF ±5%	1	1
C107	CCC1004	C, Ceramic 50V 15pF ±5%		1
C119	CES0133	C, AL Elyc 16V 47μF ±20%	1	1
C274	CCG0132	C, Ceramic Chip 50V 22pF ±5%	1	1
C342B	CCC0997	C, Ceramic 50V 3pF ±0.25pF	1	1
C392B	CCC0996	C, Ceramic 50V 2pF ±0.25pF	1	1
C2515	CCC1182	C, Ceramic 50V 1000pF ±10%	1	1
C2703	CCG0205	C, Ceramic Chip 50V 1000pF ±10%	1	1
C2704	CCG0205	C, Ceramic Chip 50V 1000pF ±10%	1	1

PEF-676 TRIGGER GENERATOR, HIGH VOLTAGE CKT, Z AMP

Symbol	Part Code	Description	Q'ty A	Q'ty B
IC801	8410386	IC, Hybrid UH-101	1	1
IC822	ILU0010	IC, Analog UN4213	1	1
IC840	IDT0117	IC, Digital TC74HC02P	1	1
IC841	IDH0801	IC, Digital HD14052BP	1	1
IC844	ILN0042	IC, Analog NJM072S	1	1
IC891	ILU0010	IC, Analog UN4213	1	1
IC896	ILU0010	IC, Analog UN4213	1	1
IC897	ILU0010	IC, Analog UN4213	1	1
IC900	8410386	IC, Hybrid UH-101	1	1
IC920	IDH0801	IC, Digital HD14052BP (MC14052BCP)	1	1

Symbol	Part Code	Description	Q'ty A	Q'ty B
IC922	ILU0010	IC, Analog UN4213	1	1
IC923	ILN0042	IC, Analog UJM072S	1	1
IC940	IDH0784	IC, Digital HD14011UBP	1	1
IC947	ILU0010	IC, Analog UN4213	1	1
IC948	ILU0010	IC, Analog UN4213	1	1
IC1001	IDH0005	IC, Digital HD10116	1	1
IC1004	ILU0010	IC, Analog UN4213	1	1
IC1005	IDH0524	IC, Digital HD10107	1	1
IC1011	IDH0002	IC, Digital HD10102	1	1
IC1020	IDH0008	IC, Digital HD10131	1	1
IC1027	ILN0044	IC, Analog NJM2903S	1	1
IC1028	ILU0010	IC, Analog UN4213	1	1
IC1034	IDH0002	IC, Digital HD10102	1	1
IC1037	IDH0005	IC, Digital HD10116	1	1
IC1040	IDH0690	IC, Digital HD74LS279	1	1
IC1050	IDS0419	IC, Digital SN74ALS00AN	1	1
IC1055	IDH0906	IC, Digital HD14529BP	1	1
IC1069	ILU0010	IC, Analog UN4213	1	1
IC1162	ILU0010	IC, Analog UN4213	1	1
IC1701	IDH0467	IC, Digital HD74LS00P	1	1
TR241	HTC0338	Transistor 2SC1906	1	1
TR242	HTC0338	Transistor 2SC1906	1	1
TR250	HTA0290	Transistor 2SA1206	1	1
TR821	HTC0338	Transistor 2SC1906	1	1
TR831	HTC0338	Transistor 2SC1906	1	1
TR832	HTC0338	Transistor 2SC1906	1	1
TR836	HTC0148	Transistor 2SC458C	1	1
TR851	HTC0768	Transistor 2SC2408	1	1
TR852	HTC0768	Transistor 2SC2408	1	1
TR866	HTC0148	Transistor 2SC458C	1	1
TR901	HTC0338	Transistor 2SC1906	1	1
TR908	HTC0338	Transistor 2SC1906	1	1
TR909	HTC0338	Transistor 2SC1906	1	1
TR933	HTC0768	Transistor 2SC2408	1	1
TR934	HTC0768	Transistor 2SC2408	1	1
TR1024	HTC0192	Transistor 2SC641K-C	1	1
TR1025	HTA0224	Transistor 2SA1029D	1	1
TR1039	HTC0148	Transistor 2SC458C	1	1
TR1043	HTC0192	Transistor 2SC641K-C	1	1
TR1045	HTA0224	Transistor 2SA1029D	1	1
TR1052	HTC0192	Transistor 2SC641K-C	1	1
TR1054	HTC0148	Transistor 2SC458C	1	1
TR1061	HTA0290	Transistor 2SA1206	1	1
TR1062	HTA0290	Transistor 2SA1206	1	1
TR1072	HTC0148	Transistor 2SC458C	1	1
TR1175	HTA0290	Transistor 2SA1206	1	1
TR1176	HTA0290	Transistor 2SA1206	1	1
TR1182	HTC0192	Transistor 2SC641K-C	1	1
TR1428	HTC0192	Transistor 2SC641K-C	1	1
TR1440	HTC0338	Transistor 2SC1906	1	1
TR1446	HTC0669	Transistor 2SC2912S	1	1
TR1447	HTA0258	Transistor 2SA1210S	1	1
TR1462	HTA0224	Transistor 2SA1029D	1	1
TR1467	HTK0099	Transistor 2SK404E-SPA-AC	1	1
TR1744	HTC0192	Transistor 2SC641K-C	1	1
D246	HDM0139	Diode MTZ 3.3 JA	1	1
D248	HDM0139	Diode MTZ 3.3 JA	1	1
D821	HDS0437	Diode 1SS133	1	1
D865	HDS0437	Diode 1SS133	1	1
D901	HDS0437	Diode 1SS133	1	1
D1004	HDS0437	Diode 1SS133	1	1

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Symbol	Part Code	Description	Q'ty A	Q'ty B
D1028	HDS0437	Diode 1SS133	1	1
D1029	HDS0437	Diode 1SS133	1	1
D1033	HDS0437	Diode 1SS133	1	1
D1034	HDS0437	Diode 1SS133	1	1
D1160	HDS0437	Diode 1SS133	1	1
D1161	HDS0437	Diode 1SS133	1	1
D1421	HDS0437	Diode 1SS133	1	1
D1435	HDX0055	Diode 1SS165	1	1
D1437	HDS0437	Diode 1SS133	1	1
D1440	HDM0140	Diode MTZ 4.7 JB	1	1
D1447	HDS0437	Diode 1SS133	1	1
D1463	HDS0477	Diode 1SS110	1	1
D1471	HDY0031	Diode Y10GA	1	1
D1472	HDY0031	Diode Y10GA	1	1
D1475	HDS0250	Diode 1SS83	1	1
D1476	HDS0250	Diode 1SS83	1	1
D1477	HDS0250	Diode 1SS83	1	1
D1478	HDS0250	Diode 1SS83	1	1
D1479	HDM0144	Diode MTZ 22 JD	1	1
R207A	RCE0753	R, Carbon 1/4W 47Ω ±5%	1	1
R208A	RCE0753	R, Carbon 1/4W 47Ω ±5%	1	1
R233	RCE0758	R, Carbon 1/4W 120Ω ±5%	1	1
R238	RCE0749	R, Carbon 1/4W 22Ω ±5%	1	1
R239	RCE0749	R, Carbon 1/4W 22Ω ±5%	1	1
R241	RME1112	R, Metal 1/4W 301Ω ±1%	1	1
R242	RCE0781	R, Carbon 1/4W 10kΩ ±5%	1	1
R243	RCE0777	R, Carbon 1/4W 4.7kΩ ±5%	1	1
R244	RCE0777	R, Carbon 1/4W 4.7kΩ ±5%	1	1
R245	RCE0761	R, Carbon 1/4W 220Ω ±5%	1	1
R246	RCE0761	R, Carbon 1/4W 220Ω ±5%	1	1
R247	RCE0772	R, Carbon 1/4W 1.8kΩ ±5%	1	1
R249	RME1066	R, Metal 1/4W 332Ω ±1%	1	1
R251	RME1057	R, Metal 1/4W 56.2Ω ±1%	1	1
R252	RME1072	R, Metal 1/4W 1.00kΩ ±1%	1	1
R801	RME1117	R, Metal 1/4W 750Ω ±1%	1	1
R802	RME1117	R, Metal 1/4W 750Ω ±1%	1	1
R803	RCE0779	R, Carbon 1/4W 6.8kΩ ±5%	1	1
R804	RCE0779	R, Carbon 1/4W 6.8kΩ ±5%	1	1
R805	RME1059	R, Metal 1/4W 82.5Ω ±1%	1	1
R806	RME1059	R, Metal 1/4W 82.5Ω ±1%	1	1
R807	RME1059	R, Metal 1/4W 82.5Ω ±1%	1	1
R808	RME1059	R, Metal 1/4W 82.5Ω ±1%	1	1
R809	RCE0757	R, Carbon 1/4W 100Ω ±5%	1	1
R810	RCE0757	R, Carbon 1/4W 100Ω ±5%	1	1
R811	RCE0757	R, Carbon 1/4W 100Ω ±5%	1	1
R812	RCE0757	R, Carbon 1/4W 100Ω ±5%	1	1
R813	RCE0781	R, Carbon 1/4W 10kΩ ±5%	1	1
R814	RCE0781	R, Carbon 1/4W 10kΩ ±5%	1	1
R818	RCE0753	R, Carbon 1/4W 47Ω ±5%	1	1
R819	RCE0743	R, Carbon 1/4W 4.7Ω ±5%	1	1
R820	RCE0765	R, Carbon 1/4W 470Ω ±5%	1	1
R821	RCE0753	R, Carbon 1/4W 47Ω ±5%	1	1
R822	RCE0767	R, Carbon 1/4W 680Ω ±5%	1	1
R823	RCE0765	R, Carbon 1/4W 470Ω ±5%	1	1
R824	RME1064	R, Metal 1/4W 221Ω ±1%	1	1
R825	RME1064	R, Metal 1/4W 221Ω ±1%	1	1
R826	RME1069	R, Metal 1/4W 562Ω ±1%	1	1

Symbol	Part Code	Description	Q'ty A	Q'ty B
R827	RME1069	R, Metal 1/4W 562Ω ±1%	1	1
R829	RCE0775	R, Carbon 1/4W 3.3kΩ ±5%	1	1
R831	RCE0749	R, Carbon 1/4W 22Ω ±5%	1	1
R832	RME1086	R, Metal 1/4W 15.0kΩ ±1%	1	1
R833	RME1086	R, Metal 1/4W 15.0kΩ ±1%	1	1
R834	RCE0769	R, Carbon 1/4W 1kΩ ±5%	1	1
R835	RCE0769	R, Carbon 1/4W 1kΩ ±5%	1	1
R836	RCE0789	R, Carbon 1/4W 47kΩ ±5%	1	1
R837	RCE0781	R, Carbon 1/4W 10kΩ ±5%	1	1
R838	RME1088	R, Metal 1/4W 22.1kΩ ±1%	1	1
R839	RME1088	R, Metal 1/4W 22.1kΩ ±1%	1	1
R840	RCE0785	R, Carbon 1/4W 22kΩ ±5%	1	1
R841	RCE0769	R, Carbon 1/4W 1kΩ ±5%	1	1
R842	RME1092	R, Metal 1/4W 47.5kΩ ±1%	1	1
R843	RME1092	R, Metal 1/4W 47.5kΩ ±1%	1	1
R844	RME1086	R, Metal 1/4W 15.0kΩ ±1%	1	1
R845	RME1086	R, Metal 1/4W 15.0kΩ ±1%	1	1
R846	RME1086	R, Metal 1/4W 15.0kΩ ±1%	1	1
R847	RME1086	R, Metal 1/4W 15.0kΩ ±1%	1	1
R848	RME1063	R, Metal 1/4W 182Ω ±1%	1	1
R849	RME1063	R, Metal 1/4W 182Ω ±1%	1	1
R850	RCE0757	R, Carbon 1/4W 100Ω ±5%	1	1
R851	RME1074	R, Metal 1/4W 1.50kΩ ±1%	1	1
R852	RME1074	R, Metal 1/4W 1.50kΩ ±1%	1	1
R853	RCE0745	R, Carbon 1/4W 10Ω ±5%	1	1
R854	RCE0755	R, Carbon 1/4W 68Ω ±5%	1	1
R855	RME1072	R, Metal 1/4W 1.00kΩ ±1%	1	1
R856	RME1072	R, Metal 1/4W 1.00kΩ ±1%	1	1
R857	RCE0761	R, Carbon 1/4W 220Ω ±5%	1	1
R858	RCE0781	R, Carbon 1/4W 10kΩ ±5%	1	1
R859	RME1079	R, Metal 1/4W 3.92kΩ ±1%	1	1
R860	RCE0745	R, Carbon 1/4W 10Ω ±5%	1	1
R861	RCE0745	R, Carbon 1/4W 10Ω ±5%	1	1
R865	RCE0781	R, Carbon 1/4W 10kΩ ±5%	1	1
R866	RCE0789	R, Carbon 1/4W 47kΩ ±5%	1	1
R868	RCE0789	R, Carbon 1/4W 47kΩ ±5%	1	1
R872	RCE0745	R, Carbon 1/4W 10Ω ±5%	1	1
R877	RCE0789	R, Carbon 1/4W 47kΩ ±5%	1	1
R878	RCE0789	R, Carbon 1/4W 47kΩ ±5%	1	1
R879	RCE0789	R, Carbon 1/4W 47kΩ ±5%	1	1
R886	RCE0753	R, Carbon 1/4W 47Ω ±5%	1	1
R887	RCE0753	R, Carbon 1/4W 47Ω ±5%	1	1
R888	RCE0775	R, Carbon 1/4W 3.3kΩ ±5%	1	1
R890	RCE0745	R, Carbon 1/4W 10Ω ±5%	1	1
R891	RCE0781	R, Carbon 1/4W 10kΩ ±5%	1	1
R892	RME1069	R, Metal 1/4W 562Ω ±1%	1	1
R893	RCE0789	R, Carbon 1/4W 47kΩ ±5%	1	1
R894	RCE0769	R, Carbon 1/4W 1kΩ ±5%	1	1
R895	RCE0777	R, Carbon 1/4W 4.7kΩ ±5%	1	1
R896	RCE0769	R, Carbon 1/4W 1kΩ ±5%	1	1
R897	RCE0777	R, Carbon 1/4W 4.7kΩ ±5%	1	1
R898	RME1117	R, Metal 1/4W 750Ω ±1%	1	1
R899	RME1117	R, Metal 1/4W 750Ω ±1%	1	1
R901	RCE0753	R, Carbon 1/4W 47Ω ±5%	1	1
R902	RCE0745	R, Carbon 1/4W 10Ω ±5%	1	1
R903	RME1064	R, Metal 1/4W 221Ω ±1%	1	1
R904	RME1064	R, Metal 1/4W 221Ω ±1%	1	1
R906	RME1069	R, Metal 1/4W 562Ω ±1%	1	1
R907	RME1069	R, Metal 1/4W 562Ω ±1%	1	1

PEF-676 TRIGGER GENERATOR, HIGH VOLTAGE CKT, Z AMP

Symbol	Part Code	Description				Q'ty A	Q'ty B
R908	RME1086	R, Metal	1/4W	15.0kΩ	±1%	1	1
R909	RME1086	R, Metal	1/4W	15.0kΩ	±1%	1	1
R910	RCE0769	R, Carbon	1/4W	1kΩ	±5%	1	1
R911	RCE0769	R, Carbon	1/4W	1kΩ	±5%	1	1
R912	RCE0749	R, Carbon	1/4W	22Ω	±5%	1	1
R913	RME1088	R, Metal	1/4W	22.1kΩ	±1%	1	1
R914	RME1088	R, Metal	1/4W	22.1kΩ	±1%	1	1
R915	RCE0769	R, Carbon	1/4W	1kΩ	±5%	1	1
R916	RCE0789	R, Carbon	1/4W	47kΩ	±5%	1	1
R917	RCE0789	R, Carbon	1/4W	47kΩ	±5%	1	1
R919	RME1072	R, Metal	1/4W	1.00kΩ	±1%	1	1
R921	RME1092	R, Metal	1/4W	47.5kΩ	±1%	1	1
R922	RME1092	R, Metal	1/4W	47.5kΩ	±1%	1	1
R923	RME1086	R, Metal	1/4W	15.0kΩ	±1%	1	1
R924	RME1086	R, Metal	1/4W	15.0kΩ	±1%	1	1
R925	RME1086	R, Metal	1/4W	15.0kΩ	±1%	1	1
R926	RME1063	R, Metal	1/4W	182Ω	±1%	1	1
R927	RME1063	R, Metal	1/4W	182Ω	±1%	1	1
R928	RCE0757	R, Carbon	1/4W	100Ω	±5%	1	1
R920	RCE0783	R, Carbon	1/4W	15kΩ	±5%	1	1
R930	RME1074	R, Metal	1/4W	1.50kΩ	±1%	1	1
R931	RME1074	R, Metal	1/4W	1.50kΩ	±1%	1	1
R932	RCE0745	R, Carbon	1/4W	10Ω	±5%	1	1
R933	RCE0789	R, Carbon	1/4W	47kΩ	±5%	1	1
R934	RCE0767	R, Carbon	1/4W	680Ω	±5%	1	1
R935	RCE0755	R, Carbon	1/4W	68Ω	±5%	1	1
R936	RME1072	R, Metal	1/4W	1.00kΩ	±1%	1	1
R937	RME1072	R, Metal	1/4W	1.00kΩ	±1%	1	1
R938	RCE0761	R, Carbon	1/4W	220Ω	±5%	1	1
R940	RCE0781	R, Carbon	1/4W	10kΩ	±5%	1	1
R941	RME1080	R, Metal	1/4W	4.75kΩ	±1%	1	1
R942	RCE0789	R, Carbon	1/4W	47kΩ	±5%	1	1
R943	RCE0789	R, Carbon	1/4W	47kΩ	±5%	1	1
R944	RCE0789	R, Carbon	1/4W	47kΩ	±5%	1	1
R945	RCE0789	R, Carbon	1/4W	47kΩ	±5%	1	1
R946	RCE0781	R, Carbon	1/4W	10kΩ	±5%	1	1
R947	RCE0781	R, Carbon	1/4W	10kΩ	±5%	1	1
R948	RCE0743	R, Carbon	1/4W	4.7Ω	±5%	1	1
R949	RCE0743	R, Carbon	1/4W	4.7Ω	±5%	1	1
R951	RCE0745	R, Carbon	1/4W	10Ω	±5%	1	1
R952	RCE0745	R, Carbon	1/4W	10Ω	±5%	1	1
R953	RME1069	R, Metal	1/4W	562Ω	±1%	1	1
R957	RCE0775	R, Carbon	1/4W	3.3kΩ	±5%	1	1
R959	RCE0753	R, Carbon	1/4W	47Ω	±5%	1	1
R960	RCE0753	R, Carbon	1/4W	47Ω	±5%	1	1
R970	RCE0769	R, Carbon	1/4W	1kΩ	±5%	1	1
R971	RCE0777	R, Carbon	1/4W	4.7kΩ	±5%	1	1
R972	RCE0769	R, Carbon	1/4W	1kΩ	±5%	1	1
R1001	RME1066	R, Metal	1/4W	332Ω	±1%	1	1
R1002	RME1066	R, Metal	1/4W	332Ω	±1%	1	1
R1003	RCE0765	R, Carbon	1/4W	470Ω	±5%	1	1
R1005	RCE0773	R, Carbon	1/4W	2.2kΩ	±5%	1	1
R1006	RCE0773	R, Carbon	1/4W	2.2kΩ	±5%	1	1
R1007	RCE0833	R, Carbon	1/4W	240kΩ	±5%	1	1
R1008	RCE0769	R, Carbon	1/4W	1kΩ	±5%	1	1
R1009	RCE0779	R, Carbon	1/4W	6.8kΩ	±5%	1	1
R1011	RCE0767	R, Carbon	1/4W	680Ω	±5%	1	1
R1012	RCE0771	R, Carbon	1/4W	1.5kΩ	±5%	1	1
R1013	RCE0779	R, Carbon	1/4W	6.8kΩ	±5%	1	1
R1014	RCE0774	R, Carbon	1/4W	2.7kΩ	±5%	1	1
R1015	RCE0782	R, Carbon	1/4W	12kΩ	±5%	1	1
R1016	RCE0781	R, Carbon	1/4W	10kΩ	±5%	1	1
R1017	RCE0765	R, Carbon	1/4W	470Ω	±5%	1	1

Symbol	Part Code	Description				Q'ty A	Q'ty B
R1018	RCE0781	R, Carbon	1/4W	10kΩ	±5%	1	1
R1019	RCE0773	R, Carbon	1/4W	2.2kΩ	±5%	1	1
R1020	RCE0769	R, Carbon	1/4W	1kΩ	±5%	1	1
R1021	RCE0766	R, Carbon	1/4W	560Ω	±5%	1	1
R1022	RCE0765	R, Carbon	1/4W	470Ω	±5%	1	1
R1023	RCE0761	R, Carbon	1/4W	220Ω	±5%	1	1
R1024	RCE0753	R, Carbon	1/4W	47Ω	±5%	1	1
R1025	RCE0749	R, Carbon	1/4W	22Ω	±5%	1	1
R1026	RCE0797	R, Carbon	1/4W	220kΩ	±5%	1	1
R1027	RCE0769	R, Carbon	1/4W	1kΩ	±5%	1	1
R1028	RCE0777	R, Carbon	1/4W	4.7kΩ	±5%	1	1
R1029	RCE0775	R, Carbon	1/4W	3.3kΩ	±5%	1	1
R1030	RCE0777	R, Carbon	1/4W	4.7kΩ	±5%	1	1
R1032	RCE0757	R, Carbon	1/4W	100Ω	±5%	1	1
R1033	RCE0779	R, Carbon	1/4W	6.8kΩ	±5%	1	1
R1034	RCE0779	R, Carbon	1/4W	6.8kΩ	±5%	1	1
R1035	RCE0767	R, Carbon	1/4W	680Ω	±5%	1	1
R1036	RCE0767	R, Carbon	1/4W	680Ω	±5%	1	1
R1037	RCE0761	R, Carbon	1/4W	220Ω	±5%	1	1
R1038	RCE0789	R, Carbon	1/4W	47kΩ	±5%	1	1
R1039	RCE0789	R, Carbon	1/4W	47kΩ	±5%	1	1
R1040	RCE0771	R, Carbon	1/4W	1.5kΩ	±5%	1	1
R1041	RCE0780	R, Carbon	1/4W	8.2kΩ	±5%	1	1
R1042	RCE0774	R, Carbon	1/4W	2.7kΩ	±5%	1	1
R1043	RCE0743	R, Carbon	1/4W	4.7Ω	±5%	1	1
R1044	RCE0779	R, Carbon	1/4W	6.8kΩ	±5%	1	1
R1046	RCE0789	R, Carbon	1/4W	47kΩ	±5%	1	1
R1047	RCE0789	R, Carbon	1/4W	47kΩ	±5%	1	1
R1048	RCE0743	R, Carbon	1/4W	4.7Ω	±5%	1	1
R1049	RCE0743	R, Carbon	1/4W	4.7Ω	±5%	1	1
R1050	RCE0757	R, Carbon	1/4W	100Ω	±5%	1	1
R1051	RCE0779	R, Carbon	1/4W	6.8kΩ	±5%	1	1
R1052	RSE0434	R, Solid	1/4W	10MΩ	±5%	1	1
R1053	RCE0789	R, Carbon	1/4W	47kΩ	±5%	1	1
R1054	RCE0757	R, Carbon	1/4W	100Ω	±5%	1	1
R1055	RCE0783	R, Carbon	1/4W	15kΩ	±5%	1	1
R1056	RCE0786	R, Carbon	1/4W	27kΩ	±5%	1	1
R1057	RCE0753	R, Carbon	1/4W	47Ω	±5%	1	1
R1058	RCE0789	R, Carbon	1/4W	47kΩ	±5%	1	1
R1060	RCE0767	R, Carbon	1/4W	680Ω	±5%	1	1
R1061	RCE0767	R, Carbon	1/4W	680Ω	±5%	1	1
R1062	RCE0767	R, Carbon	1/4W	680Ω	±5%	1	1
R1063	RCE0769	R, Carbon	1/4W	1kΩ	±5%	1	1
R1064	RCE0767	R, Carbon	1/4W	680Ω	±5%	1	1
R1065	RCE0767	R, Carbon	1/4W	680Ω	±5%	1	1
R1069	RCE0789	R, Carbon	1/4W	47kΩ	±5%	1	1
R1073	RCE0789	R, Carbon	1/4W	47kΩ	±5%	1	1
R1074	RCE0769	R, Carbon	1/4W	1kΩ	±5%	1	1
R1151	RME1066	R, Metal	1/4W	332Ω	±1%	1	1
R1152	RME1066	R, Metal	1/4W	332Ω	±1%	1	1
R1153	RCE0765	R, Carbon	1/4W	470Ω	±5%	1	1
R1154	RCE0765	R, Carbon	1/4W	470Ω	±5%	1	1
R1155	RCE0783	R, Carbon	1/4W	15kΩ	±5%	1	1
R1156	RCE0786	R, Carbon	1/4W	27kΩ	±5%	1	1
R1157	RCE0769	R, Carbon	1/4W	1kΩ	±5%	1	1
R1158	RCE0769	R, Carbon	1/4W	1kΩ	±5%	1	1
R1159	RCE0779	R, Carbon	1/4W	6.8kΩ	±5%	1	1
R1160	RCE0767	R, Carbon	1/4W	680Ω	±5%	1	1
R1161	RCE0767	R, Carbon	1/4W	680Ω	±5%	1	1
R1162	RCE0779	R, Carbon	1/4W	6.8kΩ	±5%	1	1
R1163	RCE0761	R, Carbon	1/4W	220Ω	±5%	1	1
R1164	RCE0771	R, Carbon	1/4W	1.5kΩ	±5%	1	1
R1165	RCE0780	R, Carbon	1/4W	8.2kΩ	±5%	1	1

PEF-676 TRIGGER GENERATOR, HIGH VOLTAGE CKT, Z AMP

Symbol	Part Code	Description	Q'ty A	Q'ty B
R1166	RCE0774	R, Carbon 1/4W 2.7kΩ ±5%	1	1
R1167	RCE0767	R, Carbon 1/4W 680Ω ±5%	1	1
R1168	RCE0743	R, Carbon 1/4W 4.7Ω ±5%	1	1
R1172	RCE0767	R, Carbon 1/4W 680Ω ±5%	1	1
R1173	RCE0767	R, Carbon 1/4W 68Ω ±5%	1	1
R1175	RCE0769	R, Carbon 1/4W 1kΩ ±5%	1	1
R1176	RCE0767	R, Carbon 1/4W 680Ω ±5%	1	1
R1177	RCE0767	R, Carbon 1/4W 680Ω ±5%	1	1
R1181	RCE0757	R, Carbon 1/4W 100Ω ±5%	1	1
R1182	RCE0777	R, Carbon 1/4W 4.7kΩ ±5%	1	1
R1183	RCE0789	R, Carbon 1/4W 47kΩ ±5%	1	1
R1184	RCE0753	R, Carbon 1/4W 47Ω ±5%	1	1
R1185	RCE0789	R, Carbon 1/4W 47kΩ ±5%	1	1
R1199	RCE0743	R, Carbon 1/4W 4.7Ω ±5%	1	1
R1421	RCE0782	R, Carbon 1/4W 12kΩ ±5%	1	1
R1422	RCE0753	R, Carbon 1/4W 47Ω ±5%	1	1
R1423	RME1073	R, Metal 1/4W 1.21kΩ ±1%	1	1
R1425	RME1073	R, Metal 1/4W 1.21kΩ ±1%	1	1
R1426	RME1072	R, Metal 1/4W 1.00kΩ ±1%	1	1
R1428	RME1084	R, Metal 1/4W 10.0kΩ ±1%	1	1
R1434	RCE0767	R, Carbon 1/4W 680Ω ±5%	1	1
R1435	RME1088	R, Metal 1/4W 22.1kΩ ±1%	1	1
R1436	RCE0745	R, Carbon 1/4W 10Ω ±5%	1	1
R1438	RCE0762	R, Carbon 1/4W 270Ω ±5%	1	1
R1439	RCE0769	R, Carbon 1/4W 1kΩ ±5%	1	1
R1440	RCE0757	R, Carbon 1/4W 100Ω ±5%	1	1
R1441	RME1369	R, Metal 1W 15kΩ ±5%	1	1
R1442	RCE0753	R, Carbon 1/4W 47Ω ±5%	1	1
R1443	RCE0788	R, Carbon 1/4W 39kΩ ±5%	1	1
R1444	RCE0782	R, Carbon 1/4W 12kΩ ±5%	1	1
R1445	RZR0001	R, Fusing 1/4W 1kΩ ±5%	1	1
R1446	RCE0719	R, Carbon 1/2W 15kΩ ±5%	1	1
R1447	RCE0757	R, Carbon 1/4W 100Ω ±5%	1	1
R1461	RCE0757	R, Carbon 1/4W 100Ω ±5%	1	1
R1462	RCE0771	R, Carbon 1/4W 1.5kΩ ±5%	1	1
R1463	RCE0793	R, Carbon 1/4W 100kΩ ±5%	1	1
R1464	RCE0797	R, Carbon 1/4W 220kΩ ±5%	1	1
R1465	RME0722	R, Metal 1/4W 392kΩ ±1%	1	1
R1466	RME1097	R, Metal 1/4W 121kΩ ±1%	1	1
R1467	RCE0769	R, Carbon 1/4W 1kΩ ±5%	1	1
R1469	RCE0761	R, Carbon 1/4W 220Ω ±5%	1	1
R1470	RMV0004	R, Metal 1/2W 22.1MΩ ±1%	1	1
R1471	RCE0781	R, Carbon 1/4W 10kΩ ±5%	1	1
R1472	RCE0715	R, Carbon 1/2W 6.8kΩ ±5%	1	1
R1475	RMV0010	R, Metal 1/2W 2.2MΩ ±5%	1	1
R1476	RSE0434	R, Solid 1/4W 10MΩ ±5%	1	1
R1477	RCE0781	R, Carbon 1/4W 10kΩ ±5%	1	1
R1478	RCE0769	R, Carbon 1/4W 1kΩ ±5%	1	1
R1479	RCE0781	R, Carbon 1/4W 10kΩ ±5%	1	1
R1701	RCE0743	R, Carbon 1/4W 4.7Ω ±5%	1	1
R1702	RCE0757	R, Carbon 1/4W 100Ω ±5%	1	1
R1703	RCE0757	R, Carbon 1/4W 100Ω ±5%	1	1
R1710	RCE0757	R, Carbon 1/4W 100Ω ±5%	1	1
R1711	RCE0777	R, Carbon 1/4W 4.7kΩ ±5%	1	1
R1742	RCE0777	R, Carbon 1/4W 4.7kΩ ±5%	1	1
R1743	RCE0757	R, Carbon 1/4W 100Ω ±5%	1	1
R1744	RCE0777	R, Carbon 1/4W 4.7kΩ ±5%	1	1
R1745	RCE0781	R, Carbon 1/4W 10kΩ ±5%	1	1
R1746	RCE0743	R, Carbon 1/4W 4.7Ω ±5%	1	1
R1747	RCE0743	R, Carbon 1/4W 4.7Ω ±5%	1	1
R1748	RCE0743	R, Carbon 1/4W 4.7Ω ±5%	1	1
R1749	RCE0743	R, Carbon 1/4W 4.7Ω ±5%	1	1
R1751	RCE0743	R, Carbon 1/4W 4.7Ω ±5%	1	1
R1752	RCE0765	R, Carbon 1/4W 470Ω ±5%	1	1
R1805	RCE0767	R, Carbon 1/4W 680Ω ±5%	1	1
R1807	RCE0767	R, Carbon 1/4W 680Ω ±5%	1	1
R1831	RCE0749	R, Carbon 1/4W 22Ω ±5%	1	1
R1838	RCE0777	R, Carbon 1/4W 4.7kΩ ±5%	1	1
R1839	RCE0777	R, Carbon 1/4W 4.7kΩ ±5%	1	1
R1868	RME1072	R, Metal 1/4W 1.00kΩ ±1%	1	1
R1888	RCE0760	R, Carbon 1/4W 180Ω ±5%	1	1
R1912	RCE0749	R, Carbon 1/4W 22Ω ±5%	1	1
R1957	RCE0760	R, Carbon 1/4W 180Ω ±5%	1	1
RV247	RNE0058	VR, Metal EVN 39C00YB13(1K)	1	1
RV801	RNE0050	VR, Metal EVN 39C00YB52(500)	1	1
RV802	RNE0050	VR, Metal EVN 39C00YB52(500)	1	1
RV803	RNE0053	VR, Metal EVN 39C00YB24(20K)	1	1
RV804	RNE0053	VR, Metal EVN 39C00YB24(20K)	1	1
RV858	RNE0053	VR, Metal EVN 39C00YB24(20K)	1	1
RV940	RNE0053	VR, Metal EVN 39C00YB24(20K)	1	1
RV1479	RNE0047	VR, Metal EVN 39C00YB54(50K)	1	1
C242	CCC1002	C, Ceramic 50V 10pF ±0.5pF	1	1
C245	CCC1182	C, Ceramic 50V 1000pF ±10%	1	1
C246	CCC1182	C, Ceramic 50V 1000pF ±10%	1	1
C248	CCC1030	C, Ceramic 50V 10000pF +80 -20%	1	1
C249	CES0133	C, AL Elyc 16V 47μF ±20%	1	1
C250	CCC1182	C, Ceramic 50V 1000pF ±10%	1	1
C251	CCC1004	C, Ceramic 50V 15pF ±5%	1	1
C332	CCC1133	C, Ceramic 50V 1pF ±0.25pF	1	1
C813	CCC1014	C, Ceramic 50V 47pF ±5%	1	1
C814	CCC1014	C, Ceramic 50V 47pF ±5%	1	1
C820	CCC1025	C, Ceramic 50V 100pF ±10%	1	1
C822	CCC1013	C, Ceramic 50V 39pF ±5%	1	1
C823	CCC1013	C, Ceramic 50V 39pF ±5%	1	1
C824	CES0133	C, AL Elyc 16V 47μF ±20%	1	1
C832	CQA0129	C, Plastic 50V 0.022μF ±10%	1	1
C834	CQA0129	C, Plastic 50V 0.022μF ±10%	1	1
C838	CEX0230	C, AL Elyc 50V 1μF(BP) ±20%	1	1
C839	CEX0230	C, AL Elyc 50V 1μF(BP) ±20%	1	1
C846	CCC1014	C, Ceramic 50V 47pF ±5%	1	1
C847	CCC1014	C, Ceramic 50V 47pF ±5%	1	1
C850	CCC1365	C, Ceramic 50V 680pF ±10%	1	1
C854	CCC1030	C, Ceramic 50V 10000pF +80 -20%	1	1
C858	CCC1030	C, Ceramic 50V 10000pF +80 -20%	1	1
C859	CCC1030	C, Ceramic 50V 10000pF +80 -20%	1	1
C865	CEX0230	C, AL Elyc 50V 1μF (BP) ±20%	1	1
C866	CCC1002	C, Ceramic 50V 10pF ±0.5pF	1	1
C889	CCC1356	C, Ceramic 50V 470pF ±10%	1	1
C890	CCC1030	C, Ceramic 50V 10000pF +80 -20%	1	1
C891	CCC1030	C, Ceramic 50V 10000pF +80 -20%	1	1
C894	CCC1030	C, Ceramic 50V 10000pF +80 -20%	1	1
C896	CCC1030	C, Ceramic 50V 10000pF +80 -20%	1	1
C897	CCC1030	C, Ceramic 50V 10000pF +80 -20%	1	1
C901	CCC1013	C, Ceramic 50V 39pF ±5%	1	1
C902	CCC1013	C, Ceramic 50V 39pF ±5%	1	1
C905	CES0133	C, AL Elyc 16V 47μF ±20%	1	1
C913	CEX0230	C, AL Elyc 50V 1μF (BP) ±20%	1	1

PEF-676 TRIGGER GENERATOR, HIGH VOLTAGE CKT, Z AMP

Symbol	Part Code	Description				Q'ty A	Q'ty B
C914	CEX0230	C, AL Elyc	50V	1μF(BP)	±20%	1	1
C915	CCC1030	C, Ceramic	50V	10000 pF	+80 −20%	1	1
C916	CCC1030	C, Ceramic	50V	10000 pF	+80 −20%	1	1
C925	CQA0129	C, Plastic	50V	0.022μF	±10%	1	1
C926	CQA0129	C, Plastic	50V	0.022μF	±10%	1	1
C927	CCC1014	C, Ceramic	50V	47 pF	±5%	1	1
C928	CCC1365	C, Ceramic	50V	680 pF	±10%	1	1
C929	CCC1014	C, Ceramic	50V	47 pF	±5%	1	1
C935	CCC1030	C, Ceramic	50V	10000 pF	+80 −20%	1	1
C940	CCC1030	C, Ceramic	50V	10000 pF	+80 −20%	1	1
C946	CCC1014	C, Ceramic	50V	47 pF	±5%	1	1
C947	CCC1014	C, Ceramic	50V	47 pF	±5%	1	1
C951	CCC1030	C, Ceramic	50V	10000 pF	+80 −20%	1	1
C952	CCC1030	C, Ceramic	50V	10000 pF	+80 −20%	1	1
C958	CCC1356	C, Ceramic	50V	470 pF	±10%	1	1
C1021	CQA0129	C, Plastic	50V	0.022μF	±10%	1	1
C1024	CCC1030	C, Ceramic	50V	10000 pF	+80 −20%	1	1
C1025	CCC1182	C, Ceramic	50V	1000 pF	±10%	1	1
C1030	CEX0230	C, AL Elyc	50V	1μF(BP)	±20%	1	1
C1042	CCC1007	C, Ceramic	50V	22 pF	±5%	1	1
C1043	CCC1030	C, Ceramic	50V	10000 pF	+80 −20%	1	1
C1048	CCC1030	C, Ceramic	50V	10000 pF	+80 −20%	1	1
C1049	CCC1030	C, Ceramic	50V	10000 pF	+80 −20%	1	1
C1051	CCC1182	C, Ceramic	50V	1000 pF	±10%	1	1
C1055	CES0226FY	C, AL Elyc	50V	3.3μF	±20%	1	1
C1056	CQA0124	C, Plastic	50V	0.1μF	±10%	1	1
C1057	CQA0127	C, Plastic	50V	0.01μF	±10%	1	1
C1060	CCC1030	C, Ceramic	50V	10000 pF	+80 −20%	1	1
C1061	CCC1030	C, Ceramic	50V	10000 pF	+80 −20%	1	1
C1062	CCC1030	C, Ceramic	50V	10000 pF	+80 −20%	1	1
C1063	CCC1030	C, Ceramic	50V	10000 pF	+80 −20%	1	1
C1067	CEX0230	C, AL Elyc	50V	1μF(BP)	±20%	1	1
C1068	CQA0127	C, Plastic	50V	0.01μF	±10%	1	1
C1069	CCC1359	C, Ceramic	50V	150 pF	±5%	1	1
C1070	CCC1014	C, Ceramic	50V	47 pF	±5%	1	1
C1166	CCC1007	C, Ceramic	50V	22 pF	±5%	1	1
C1168	CCC1030	C, Ceramic	50V	10000 pF	+80 −20%	1	1
C1199	CCC1030	C, Ceramic	50V	10000 pF	+80 −20%	1	1
C1421	CCC1007	C, Ceramic	50V	22 pF	±5%	1	1
C1426	CCC1030	C, Ceramic	50V	10000 pF	+80 −20%	1	1
C1436	CCC1011	C, Ceramic	50V	33 pF	±5%	1	1
C1441	CCD0272	C, Ceramic	500V	1 pF	±0.25pF	1	1
C1442	CCC1030	C, Ceramic	50V	10000 pF	+80 −20%	1	1
C1443	CCC1030	C, Ceramic	50V	10000 pF	+80 −20%	1	1
C1444	CCD2087	C, Ceramic	500V	4700 pF	+100 −0 %	1	1
C1445	CCC1030	C, Ceramic	50V	10000 pF	+80 −20%	1	1
C1446	CCD0287	C, Ceramic	500V	4700 pF	+100 −0 %	1	1
C1447	CET0033	C, AL Elyc	160V	1μF	±20%	1	1
C1469	CQA0122	C, Plastic	50V	0.047μF	±10%	1	1
C1461	CES0035	C, AL Elyc	50V	47μF	±10%	1	1
C1462	CQA0122	C, Plastic	50V	0.047μF	±10%	1	1
C1467	CQA0122	C, Plastic	50V	0.047μF	±10%	1	1
C1470	CCD0246	C, Ceramic	2kV	1000 pF	±10%	1	1
C1471	CCD0231	C, Ceramic	2000V	4700 pF	+80 −20%	1	1
C1472	CCD0231	C, Ceramic	2000V	4700 pF	+80 −20%	1	1

Symbol	Part Code	Description				Q'ty A	Q'ty B
C1473	CCD0231	C, Ceramic	2000V	4700 pF	+80 −20%	1	1
C1474	CCD0231	C, Ceramic	2000V	4700 pF	+80 −20%	1	1
C1475	CCD0282	C, Ceramic	500V	47 pF	±5%	1	1
C1477	CCD0246	C, Ceramic	2kV	1000 pF	±10%	1	1
C1478	CCD0231	C, Ceramic	2000V	4700 pF	+80 −20%	1	1
C1479	CET0033	C, AL Elyc	160V	1μF	±20%	1	1
C1701	CCC1030	C, Ceramic	50V	10000 pF	+80 −20%	1	1
C1746	CCC1030	C, Ceramic	50V	10000 pF	+80 −20%	1	1
C1747	CCC1030	C, Ceramic	50V	10000 pF	+80 −20%	1	1
C1748	CCC1030	C, Ceramic	50V	10000 pF	+80 −20%	1	1
C1749	CCC1030	C, Ceramic	50V	10000 pF	+80 −20%	1	1
C1838	CCC1027	C, Ceramic	50V	220 pF	±10%	1	1
C1839	CCC1027	C, Ceramic	50V	220 pF	±10%	1	1
C1888	CCC0999	C, Ceramic	50V	5 pF	±0.25pF	1	1
C1957	CCC0999	C, Ceramic	50V	5 pF	±0.25pF	1	1
L805	TLE0084	Coil		EL0606R-1R0M		1	1
L807	TLE0084	Coil		EL0606R-1R0M		1	1
L825	TLE0084	Coil		EL0606R-1R0M		1	1
L840	TLE0058	Coil		EL0606R-100K		1	1
L841	TLE0058	Coil		EL0606R-100K		1	1
L857	TLE0084	Coil		EL0606R-1R0M		1	1
L904	TLE0084	Coil		EL0606R-1R0M		1	1
L938	TLE0084	Coil		EL0606R-1R0M		1	1
L1021	TLF0148	Coil		FL-7H 6.8mH	±5%	1	1
L1064	TLE0086	Coil		EL0606R-2R2M		1	1
L1065	TLE0086	Coil		EL0606R-2R2M		1	1
L1176	TLE0086	Coil		EL0606R-2R2M		1	1
L1177	TLE0086	Coil		EL0606R-2R2M		1	1
L1461	TLE0120	Coil		ELE-Y 6R8 KA		1	1
T1461	3184280	XFMR				1	1
P246	JBB0021	Connector		B3B-XH-A		1	1
P803	JBC0095	Card Fit Conn.		CF-007		1	1
P891	JBB0027	Connector		B2B-XH-A		1	1
P897	JBB0021	Connector		B3B-XH-A		1	1
P1000	JBC0101	Card Fit Conn.		CF-019		1	1
P1422	JBB0027	Connector		B2B-XH-A		1	1
P1446	JBB0027	Connector		B2B-XH-A		1	1
P1460	JBB0026	Connector		B10B-XH-A		1	1
P1476	JBB0021	Connector		B3B-XH-A		1	1
P1700	JBB0028	Connector		B4B-XH-A		1	1
P2300	JBC0101	Card Fit Conn.		CF-019		1	1
P2400	JBC0096	Card Fit Conn.		CF-009		1	1
NL1476	ELS0031	Lamp		SA-200DSS		1	1
MUT1471	3184284	Multiplier				1	1
F1461	EFI0001	Fuse		ICP-F25 (1A)		1	1

PEF-676 TRIGGER GENERATOR, HIGH VOLTAGE CKT, Z AMP

Symbol	Part Code	Description			Q'ty A	Q'ty B
R889	RCE0751	R, Carbon	1/4W	33Ω ±5%	1	1
R958	RCE0751	R, Carbon	1/4W	33Ω ±5%	1	1
C801	CES0133	C, AL Elyc	16V	47μF ±20%	1	1
C802	CES0133	C, AL Elyc	16V	47μF ±20%	1	1
C803	CES0133	C, AL Elyc	16V	47μF ±20%	1	1
C904	CCC0996	C, Ceramic	50V	2pF ±0.25pF	1	1
C1465	CET0033	C, AL Elyc	160V	1μF ±20%	1	1
L249	TLE0120	Coil	ELE-Y 6R8 KA		1	1
P801	JBB0023	Connector	B8B-XH-A		1	1
P1461	JBB0021	Connector	B3B-XH-A		1	1

PEF-677 SWEEP GENERATOR, CRT CONTROL

Symbol	Part Code	Description		Q'ty A	Q'ty B
IC1101	IDH0467	IC, Digital	HD74LS00P	1	1
IC1120	IDH0713	IC, Digital	HD74LS109AP	1	1
IC1122	IDH0467	IC, Digital	HD74LS00P	1	1
IC1123	IDH0646	IC, Digital	HD74LS02P	1	1
IC1124	IDH0467	IC, Digital	HD74LS00P	1	1
IC1138	ILU0010	IC, Analog	UN4213	1	1
IC1231	IDH0906	IC, Digital	HD14529BP	1	1
IC1276	IDH0906	IC, Digital	HD14529BP	1	1
TR1073	HTK0110	Transistor	2SK332E	1	1
TR1075	HTC0148	Transistor	2SC458C	1	1
TR1080	HTC0192	Transistor	2SC641K-C	1	1
TR1084	HTC0338	Transistor	2SC1906	1	1
TR1085	HTA0224	Transistor	2SA1029D	1	1
TR1086	HTA0224	Transistor	2SA1029D	1	1
TR1087	HTC0192	Transistor	2SC641K-C	1	1
TR1090	HTA0224	Transistor	2SA1029D	1	1
TR1095	HTC0192	Transistor	2SC641K-C	1	1
TR1110	HTA0290	Transistor	2SA1206-T	1	1
TR1111	HTC0192	Transistor	2SC641K-C	1	1
TR1112	HTA0290	Transistor	2SA1206-T	1	1
TR1113	HTC0192	Transistor	2SC641K-C	1	1
TR1126	HTC0148	Transistor	2SC458C	1	1
TR1127	HTA0224	Transistor	2SA1029D	1	1
TR1130	HTC0148	Transistor	2SC458C	1	1
TR1134	HTC0148	Transistor	2SC458C	1	1
TR1188	HTK0110	Transistor	2SK332E	1	1
TR1190	HTC0192	Transistor	2SC641K-C	1	1
TR1193	HTC0338	Transistor	2SC1906	1	1
TR1200	HTC0148	Transistor	2SC458C	1	1
TR1224	HTC0813	Transistor	2SC2853E	1	1
TR1275	HTC0813	Transistor	2SC2853E	1	1
TR1301	HTC0338	Transistor	2SC1906	1	1
TR1310	HTC0338	Transistor	2SC1906	1	1
TR1314	HTA0224	Transistor	2SA1029D	1	1
TR1317	HTA0224	Transistor	2SA1029D	1	1
TR1451	HTC0148	Transistor	2SC458C	1	1
TR1452	HTA0224	Transistor	2SA1029D	1	1

Symbol	Part Code	Description		Q'ty A	Q'ty B
TR1455	HTA0224	Transistor	2SA1029D	1	1
D1069	HDS0437	Diode	1SS133	1	1
D1070	HDM0051	Diode	1MA161	1	1
D1072	HDM0051	Diode	MA161	1	1
D1085	HDS0437	Diode	1SS133	1	1
D1086	HDS0437	Diode	1SS133	1	1
D1096	HDS0437	Diode	1SS133	1	1
D1122	HDS0437	Diode	1SS133	1	1
D1123	HDS0437	Diode	1SS133	1	1
D1125	HDX0055	Diode	1SS165	1	1
D1126	HDX0055	Diode	1SS165	1	1
D1127	HDS0437	Diode	1SS133	1	1
D1128	HDS0437	Diode	1SS133	1	1
D1130	HDX0055	Diode	1SS165	1	1
D1131	HDS0437	Diode	1SS133	1	1
D1133	HDX0055	Diode	1SS165	1	1
D1134	HDS0437	Diode	1SS133	1	1
D1138	HDS0437	Diode	1SS133	1	1
D1139	HDS0437	Diode	1SS133	1	1
D1140	HDS0437	Diode	1SS133	1	1
D1141	HDS0437	Diode	1SS133	1	1
D1178	HDM0051	Diode	MA161	1	1
D1179	HDM0051	Diode	MA161	1	1
D1180	HDS0437	Diode	1SS133	1	1
D1455	HDS0437	Diode	1SS133	1	1
D1569	HDL0031	Diode	LN21R PH-(LF)	1	1
R1070	RCE0763	R, Carbon	1/4W 330Ω ±5%	1	1
R1071	RCE0773	R, Carbon	1/4W 2.2kΩ ±5%	1	1
R1072	RCE0789	R, Carbon	1/4W 47kΩ ±5%	1	1
R1073	RME1370	R, Metal	1/4W 3.01kΩ ±1%	1	1
R1075	RCE0776	R, Carbon	1/4W 3.9kΩ ±5%	1	1
R1076	RCE0761	R, Carbon	1/4W 220Ω ±5%	1	1
R1077	RCE0753	R, Carbon	1/4W 47Ω ±5%	1	1
R1078A	RCE0767	R, Carbon	1/4W 680Ω ±5%	1	1
R1079	RCE0771	R, Carbon	1/4W 1.5kΩ ±5%	1	1
R1080	RME1060	R, Metal	1/4W 100Ω ±1%	1	1
R1081	RCE0715	R, Carbon	1/2W 6.8kΩ ±5%	1	1
R1082	RCE0769	R, Carbon	1/4W 1kΩ ±5%	1	1
R1083	RCE0773	R, Carbon	1/4W 2.2kΩ ±5%	1	1
R1084	RCE0749	R, Carbon	1/4W 22Ω ±5%	1	1
R1085	RCE0757	R, Carbon	1/4W 100Ω ±5%	1	1
R1086	RCE0781	R, Carbon	1/4W 10kΩ ±5%	1	1
R1087	RCE0781	R, Carbon	1/4W 10kΩ ±5%	1	1
R1088	RCE0781	R, Carbon	1/4W 10kΩ ±5%	1	1
R1089	RME1060	R, Metal	1/4W 100Ω ±1%	1	1
R1090	RCE0789	R, Carbon	1/4W 47kΩ ±5%	1	1
R1091	RCE0757	R, Carbon	1/4W 100Ω ±5%	1	1
R1092	RCE0785	R, Carbon	1/4W 22kΩ ±5%	1	1
R1093	RCE0771	R, Carbon	1/4W 1.5kΩ ±5%	1	1
R1094	RCE0789	R, Carbon	1/4W 47kΩ ±5%	1	1
R1095	RCE0781	R, Carbon	1/4W 10kΩ ±5%	1	1
R1096	RCE0769	R, Carbon	1/4W 1kΩ ±5%	1	1
R1097	RCE0771	R, Carbon	1/4W 1.5kΩ ±5%	1	1
R1098	RCE0779	R, Carbon	1/4W 6.8kΩ ±5%	1	1
R1099	RCE0749	R, Carbon	1/4W 22Ω ±5%	1	1
R1100	RCE0764	R, Carbon	1/4W 390Ω ±5%	1	1
R1101	RCE0769	R, Carbon	1/4W 1kΩ ±5%	1	1
R1102	RCE0785	R, Carbon	1/4W 22kΩ ±5%	1	1
R1103	RCE0789	R, Carbon	1/4W 47kΩ ±5%	1	1
R1104	RCE0757	R, Carbon	1/4W 100Ω ±5%	1	1

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Symbol	Part Code	Description				Q'ty A	Q'ty B
R1105	RME1076	R, Metal	1/4W	2.21kΩ	±1%	1	1
R1106	RME1078	R, Metal	1/4W	3.32kΩ	±1%	1	1
R1107	RCE0781	R, Carbon	1/4W	10kΩ	±5%	1	1
R1108	RCE0781	R, Carbon	1/4W	10kΩ	±5%	1	1
R1109	RCE0789	R, Carbon	1/4W	47kΩ	±5%	1	1
R1110	RCE0753	R, Carbon	1/4W	47Ω	±5%	1	1
R1111	RME1084	R, Metal	1/4W	10.0kΩ	±1%	1	1
R1112	RCE0781	R, Carbon	1/4W	10kΩ	±5%	1	1
R1113	RME1078	R, Metal	1/4W	3.32kΩ	±1%	1	1
R1114	RCE0753	R, Carbon	1/4W	47Ω	±5%	1	1
R1115	RME1084	R, Metal	1/4W	10.0kΩ	±1%	1	1
R1116	RME1078	R, Metal	1/4W	3.32kΩ	±1%	1	1
R1117	RCE0781	R, Carbon	1/4W	10kΩ	±5%	1	1
R1118	RCE0785	R, Carbon	1/4W	22kΩ	±5%	1	1
R1119	RCE0789	R, Carbon	1/4W	47kΩ	±5%	1	1
R1120	RCE0789	R, Carbon	1/4W	47kΩ	±5%	1	1
R1121	RCE0789	R, Carbon	1/4W	47kΩ	±5%	1	1
R1122	RCE0789	R, Carbon	1/4W	47kΩ	±5%	1	1
R1123	RCE0783	R, Carbon	1/4W	15kΩ	±5%	1	1
R1124	RCE0769	R, Carbon	1/4W	1kΩ	±5%	1	1
R1125	RCE0789	R, Carbon	1/4W	47kΩ	±5%	1	1
R1126	RCE0791	R, Carbon	1/4W	68kΩ	±5%	1	1
R1128A	RCE0785	R, Carbon	1/4W	22kΩ	±5%	1	1
R1130	RCE0793	R, Carbon	1/4W	100kΩ	±5%	1	1
R1131	RCE0785	R, Carbon	1/4W	22kΩ	±5%	1	1
R1132	RCE0769	R, Carbon	1/4W	1kΩ	±5%	1	1
R1133	RME1082	R, Metal	1/4W	6.81kΩ	±1%	1	1
R1134	RME1082	R, Metal	1/4W	6.81kΩ	±1%	1	1
R1135	RCE0777	R, Carbon	1/4W	4.7kΩ	±5%	1	1
R1136	RCE0783	R, Carbon	1/4W	15kΩ	±5%	1	1
R1137	RCE0765	R, Carbon	1/4W	470Ω	±5%	1	1
R1138	RCE0776	R, Carbon	1/4W	3.9kΩ	±5%	1	1
R1139	RCE0769	R, Carbon	1/4W	1kΩ	±5%	1	1
R1140	RCE0745	R, Carbon	1/4W	10Ω	±5%	1	1
R1141	RCE0745	R, Carbon	1/4W	10Ω	±5%	1	1
R1142	RCE0745	R, Carbon	1/4W	10Ω	±5%	1	1
R1147	RCE0745	R, Carbon	1/4W	10Ω	±5%	1	1
R1148	RCE0745	R, Carbon	1/4W	10Ω	±5%	1	1
R1149	RCE0776	R, Carbon	1/4W	3.9kΩ	±5%	1	1
R1150	RCE0765	R, Carbon	1/4W	470Ω	±5%	1	1
R1151	RCE0785	R, Carbon	1/4W	22kΩ	±5%	1	1
R1170	RME1123	R, Metal	1/4W	2.43kΩ	±1%	1	1
R1174	RCE0771	R, Carbon	1/4W	1.5kΩ	±5%	1	1
R1178	RCE0763	R, Carbon	1/4W	330Ω	±5%	1	1
R1179	RCE0773	R, Carbon	1/4W	2.2kΩ	±5%	1	1
R1180	RCE0789	R, Carbon	1/4W	47kΩ	±5%	1	1
R1181A	RCE0767	R, Carbon	1/4W	680Ω	±5%	1	1
R1186	RME1078	R, Metal	1/4W	3.32kΩ	±1%	1	1
R1187	RME1370	R, Metal	1/4W	3.01kΩ	±1%	1	1
R1188	RME1060	R, Metal	1/4W	100Ω	±1%	1	1
R1189	RME1060	R, Metal	1/4W	100Ω	±1%	1	1
R1192	RCE0764	R, Carbon	1/4W	390Ω	±5%	1	1
R1193	RCE0749	R, Carbon	1/4W	22Ω	±5%	1	1
R1194	RME1076	R, Metal	1/4W	2.21kΩ	±1%	1	1
R1195	RCE0769	R, Carbon	1/4W	1kΩ	±5%	1	1
R1197	RCE0769	R, Carbon	1/4W	1kΩ	±5%	1	1
R1198	RCE0783	R, Carbon	1/4W	15kΩ	±5%	1	1
R1199	RCE0757	R, Carbon	1/4W	100Ω	±5%	1	1
R1201	RCE0769	R, Carbon	1/4W	1kΩ	±5%	1	1
R1203	RCE0833	R, Carbon	1/4W	240kΩ	±5%	1	1

Symbol	Part Code	Description				Q'ty A	Q'ty B
R1204	RCE0789	R, Carbon	1/4W	47kΩ	±5%	1	1
R1205	RCE0789	R, Carbon	1/4W	47kΩ	±5%	1	1
R1206	RCE0833	R, Carbon	1/4W	240kΩ	±5%	1	1
R1208	RCE0780	R, Carbon	1/4W	8.2kΩ	±5%	1	1
R1210	RCE0769	R, Carbon	1/4W	1kΩ	±5%	1	1
R1227	RCE0745	R, Carbon	1/4W	10Ω	±5%	1	1
R1228	RCE0753	R, Carbon	1/4W	47Ω	±5%	1	1
R1229	RCE0787	R, Carbon	1/4W	33kΩ	±5%	1	1
R1230	RCE0757	R, Carbon	1/4W	100Ω	±5%	1	1
R1233	RCE0792	R, Carbon	1/4W	82kΩ	±5%	1	1
R1234	RCE0782	R, Carbon	1/4W	12kΩ	±5%	1	1
R1271	RCE0745	R, Carbon	1/4W	10Ω	±5%	1	1
R1272	RCE0753	R, Carbon	1/4W	47Ω	±5%	1	1
R1273	RCE0773	R, Carbon	1/4W	2.2kΩ	±5%	1	1
R1274	RCE0833	R, Carbon	1/4W	240kΩ	±5%	1	1
R1275	RCE0757	R, Carbon	1/4W	100Ω	±5%	1	1
R1276	RCE0789	R, Carbon	1/4W	47kΩ	±5%	1	1
R1277	RCE0789	R, Carbon	1/4W	47kΩ	±5%	1	1
R1278	RCE0833	R, Carbon	1/4W	240kΩ	±5%	1	1
R1279	RCE0780	R, Carbon	1/4W	8.2kΩ	±5%	1	1
R1301	RCE0765	R, Carbon	1/4W	470Ω	±5%	1	1
R1302	RCE0769	R, Carbon	1/4W	1kΩ	±5%	1	1
R1303	RCE0780	R, Carbon	1/4W	8.2kΩ	±5%	1	1
R1304	RCE0792	R, Carbon	1/4W	82kΩ	±5%	1	1
R1305	RME1072	R, Metal	1/4W	1.00kΩ	±1%	1	1
R1306	RME1076	R, Metal	1/4W	2.21kΩ	±1%	1	1
R1307	RCE0763	R, Carbon	1/4W	330Ω	±5%	1	1
R1308	RME1071	R, Metal	1/4W	825Ω	±1%	1	1
R1309	RCE0756	R, Carbon	1/4W	82Ω	±5%	1	1
R1310	RME1072	R, Metal	1/4W	1.00kΩ	±1%	1	1
R1311	RME1072	R, Metal	1/4W	1.00kΩ	±1%	1	1
R1312	RME1072	R, Metal	1/4W	1.00kΩ	±1%	1	1
R1313	RCE0753	R, Carbon	1/4W	47Ω	±5%	1	1
R1314	RCE0753	R, Carbon	1/4W	47Ω	±5%	1	1
R1315	RCE0777	R, Carbon	1/4W	4.7kΩ	±5%	1	1
R1316	RCE0777	R, Carbon	1/4W	4.7kΩ	±5%	1	1
R1317	RCE0753	R, Carbon	1/4W	47Ω	±5%	1	1
R1453	RCE0749	R, Carbon	1/4W	22Ω	±5%	1	1
R1454	RCE0763	R, Carbon	1/4W	330Ω	±5%	1	1
R1455	RCE0773	R, Carbon	1/4W	2.2kΩ	±5%	1	1
R1456	RCE0785	R, Carbon	1/4W	22kΩ	±5%	1	1
R1457	RCE0777	R, Carbon	1/4W	4.7kΩ	±5%	1	1
R1459	RCE0784	R, Carbon	1/4W	18kΩ	±5%	1	1
R1466	RCE0771	R, Carbon	1/4W	1.5kΩ	±5%	1	1
R1569	RCE0769	R, Carbon	1/4W	1kΩ	±5%	1	1
RV1090	RNE0048	VR, Metal	EVN 39C00YB22 (200)			1	1
RV1128	8410400	VR, Carbon	EVJ-KAAP20B14			1	1
RV1132	8410400	VR, Carbon	EVJ-KAAP20B14			1	1
RV1135	8410399	VR, Carbon	EVJ-LLBP20B14			1	1
RV1201	RNE0051	VR, Metal	EVN 39C00YB14 (10K)			1	1
RV1202	RNE0051	VR, Metal	EVN 39C00YB14 (10K)			1	1
RV1208	RNE0051	VR, Metal	EVN 39C00YB14 (10K)			1	1
RV1271	RNE0051	VR, Metal	EVN 39C00YB14 (10K)			1	1
RV1272	RNE0051	VR, Metal	EVN 39C00YB14 (10K)			1	1
RV1278	RNE0051	VR, Metal	EVN 39C00YB14 (10K)			1	1
RV1451	8348450H	VR, Metal	CR29R 22KΩ			1	1
RV1455	8410400	VR, Carbon	EVJ-KAAP20B14			1	1
C1065	CCC1034	C, Ceramic	50V	68pF	±5%	1	1
C1073	CCC1034	C, Ceramic	50V	68pF	±5%	1	1

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Symbol	Part Code	Description	Q'ty A	Q'ty B
C1075	CCC1030	C, Ceramic 50V 10000 pF +80 −20%	1	1
C1076	CCC1014	C, Ceramic 50V 47 pF ±5%	1	1
C1080	CCC1004	C, Ceramic 50V 15 pF ±5%	1	1
C1081	CES0133	C, AL Elyc 16V 47μF ±20%	1	1
C1083	CES0133	C, AL Elyc 16V 47μF ±20%	1	1
C1084	CES0133	C, AL Elyc 16V 47μF ±20%	1	1
C1085	CCC1002	C, Ceramic 50V 10 pF ±0.5pF	1	1
C1088	CCC1030	C, Ceramic 50V 10000 pF +80 −20%	1	1
C1091	CES0133	C, AL Elyc 16V 47μF	1	1
C1094	CES0133	C, AL Elyc 16V 47μF	1	1
C1101	CCC1025	C, Ceramic 50V 100 pF ±10%	1	1
C1102	CCC1030	C, Ceramic 50V 10000 pF +80 −20%	1	1
C1103	CCC1030	C, Ceramic 50V 10000 pF +80 −20%	1	1
C1111	CES0133	C, AL Elyc 16V 47μF ±20%	1	1
C1115	CES0133	C, AL Elyc 16V 47μF ±20%	1	1
C1116	CCC1182	C, Ceramic 50V 1000 pF ±10%	1	1
C1117	CCC1182	C, Ceramic 50V 1000 pF ±10%	1	1
C1119	CCC1182	C, Ceramic 50V 1000 pF ±10%	1	1
C1120	CCC1030	C, Ceramic 50V 10000 pF +80 −20%	1	1
C1136	CCC1027	C, Ceramic 50V 220 pF ±10%	1	1
C1138	CCC1027	C, Ceramic 50V 220 pF ±10%	1	1
C1139	CCC1014	C, Ceramic 50V 47 pF ±5%	1	1
C1140	CCC1030	C, Ceramic 50V 10000 pF +80 −20%	1	1
C1141	CCC1030	C, Ceramic 50V 10000 pF +80 −20%	1	1
C1142	CCC1030	C, Ceramic 50V 10000 pF +80 −20%	1	1
C1147	CCC1030	C, Ceramic 50V 10000 pF +80 −20%	1	1
C1148	CCC1030	C, Ceramic 50V 10000 pF +80 −20%	1	1
C1150	CCC1356	C, Ceramic 50V 470 pF ±10%	1	1
C1181	CCC1030	C, Ceramic 50V 10000 pF +80 −20%	1	1
C1184	CCC1034	C, Ceramic 50V 68 pF ±5%	1	1
C1187	CCC1034	C, Ceramic 50V 68 pF ±5%	1	1
C1188	CES0133	C, AL Elyc 16V 47μF ±20%	1	1
C1189	CES0133	C, AL Elyc 16V 47μF ±20%	1	1
C1190	CCC1004	C, Ceramic 50V 15 pF ±5%	1	1
C1191	CCC1030	C, Ceramic 50V 10000 pF +80 −20%	1	1
C1193	CES0133	C, AL Elyc 16V 47μF ±20%	1	1
C1194	CES0133	C, AL Elyc 16V 47μF ±20%	1	1
C1201	CCC1030	C, Ceramic 50V 10000 pF +80 −20%	1	1
C1202	CES0133	C, AL Elyc 16V 47μF ±20%	1	1
C1204	CQA0122	C, Plastic 50V 0.047μF ±10%	1	1
C1205	CQA0122	C, Plastic 50V 0.047μF ±10%	1	1
C1210	CCC1030	C, Ceramic 50V 10000 pF +80 −20%	1	1
C1225	CCC1011	C, Ceramic 50V 33 pF ±5%	1	1
C1226	CQE0078	C, Plastic ECQ-E1225JN(JNB) Type-1	1	1
C1227	CQE0107	C, Plastic 100V 0.022μF ±2%	1	1
C1228	CMV0053	C, Mica 50V 180 pF ±5%	1	1
C1230	CCC1007	C, Ceramic 50V 22 pF ±5%	1	1
C1271	CCC1011	C, Ceramic 50V 33 pF ±5%	1	1
C1272	CQE0078	C, Plastic ECQ-E1225JN (JNB) Type-1	1	1
C1273	CQE0107	C, Plastic 100V 0.022μF ±2%	1	1
C1274	CMV0053	C, Mica 50V 180 pF ±5%	1	1
C1275	CQA0122	C, Plastic 50V 0.047μF ±10%	1	1
C1277	CQA0122	C, Plastic 50V 0.047μF ±10%	1	1

Symbol	Part Code	Description	Q'ty A	Q'ty B
C1301	CCC1030	C, Ceramic 50V 10000 pF +80 −20%	1	1
C1302	CCC1030	C, Ceramic 50V 10000 pF +80 −20%	1	1
C1303	CCC1133	C, Ceramic 50V 1 pF ±0.25pF	1	1
C1307	CES0133	C, AL Elyc 16V 47μF ±20%	1	1
C1308	CES0133	C, AL Elyc 16V 47μF ±20%	1	1
C1309	CES0133	C, AL Elyc 16V 47μF ±20%	1	1
C1310	CCC1133	C, Ceramic 50V 1 pF ±0.25pF	1	1
C1312	CES0133	C, AL Elyc 16V 47μF ±20%	1	1
C1453	CCC1030	C, Ceramic 50V 10000 pF +80 −20%	1	1
CV1225	CVE0046	C, Variable ECR-HA010A11	1	1
CV1271	CVE0046	C, Variable ECR-HA010A11	1	1
L1137	TLE0063	Coil EL0606R-330K	1	1
L1150	TLE0067	Coil EL0606R-680K	1	1
S1458	8402061C	SW, Push SUJ1-000 Nonlock (Gray Nob)	1	1
P1001	JBC0101	Card Fit Conn. CF-019	1	1
P1125	JBC0096	Card Fit Conn. CF-009	1	1
P1230	JBC0100	Card Fit Conn. CF-017	1	1
P1301	JBB0028	Connector B4B-XH-A	1	1
P1315	JBB0022	Connector B6B-XH-A	1	1
P1422	JBB0027	Connector B2B-XH-A	1	1
P1452	JBB0027	Connector B2B-XH-A	1	1
P1455	JBB0023	Connector B8B-XH-A	1	1
P1458	JBB0027	Connector B2B-XH-A	1	1
F1451	EFI0002	Fuse ICP-F10 (0.4A)	1	1
IC1121	IDH0475	IC, Digital HD74LS10P	1	1
D1071	HDS0437	Diode 1SS133	1	1
D1229	HDS0477	Diode 1SS110	1	1
R1190	RCE0749	R, Carbon 1/4W 22Ω ±5%	1	1
R1191	RCE0715	R, Carbon 1/4W 6.8kΩ ±5%	1	1

PEF-678 H OUT AMP, FOCUS AMP

Symbol	Part Code	Description	Q'ty A	Q'ty B
TR1324	HTA0224	Transistor 2SA1029D	1	1
TR1325	HTA0224	Transistor 2SA1029D	1	1
TR1329	HTC0148	Transistor 2SC458C	1	1
TR1331	HTA0224	Transistor 2SA1029D	1	1
TR1335	HTC0148	Transistor 2SC458C	1	1

PEF-678 H OUT AMP, FOCUS AMP

Symbol	Part Code	Description	Q'ty A	Q'ty B
TR1336	HTC0148	Transistor 2SC458C	1	1
TR1339	HTC0148	Transistor 2SC458C	1	1
TR1341	HTC0338	Transistor 2SC1906	1	1
TR1342	HTC0338	Transistor 2SC1906	1	1
TR1349	HTA0290	Transistor 2SA1206	1	1
TR1350	HTA0290	Transistor 2SA1206	1	1
TR1355	HTA0290	Transistor 2SA1206	1	1
TR1356	HTA0290	Transistor 2SA1206	1	1
TR1358	HTC0192	Transistor 2SC641K-C	1	1
TR1359	HTC0192	Transistor 2SC641K-C	1	1
TR1362	HTA0224	Transistor 2SA1029D	1	1
TR1364	HTA0224	Transistor 2SA1029D	1	1
TR1374	HTC0338	Transistor 2SC1906	1	1
TR1375	HTC0338	Transistor 2SC1906	1	1
TR1382	HTC0768	Transistor 2SC2408	1	1
TR1383	HTC0768	Transistor 2SC2408	1	1
TR1386	HTA0258	Transistor 2SA1210S	1	1
TR1388	HTA0258	Transistor 2SA1210S	1	1
TR1390	HTC0669	Transistor 2SC2912S	1	1
TR1392	HTC0669	Transistor 2SC2912S	1	1
TR1401	HTC0148	Transistor 2SC458C	1	1
TR1402	HTC0148	Transistor 2SC458C	1	1
TR1403	HTC0148	Transistor 2SC458C	1	1
TR1404	HTC0148	Transistor 2SC458C	1	1
TR1409	HTA0224	Transistor 2SA1029D	1	1
TR1414	HTA0104	Transistor 2SA778AK	1	1
TR1417	HTC0669	Transistor 2SC2912S	1	1
D1330	HDS0437	Diode 1SS133	1	1
D1334	HDM0141	Diode MTZ 7.5 JC	1	1
D1382	HDM0140	Diode MTZ 4.7 JB	1	1
D1383	HDM0140	Diode MTZ 4.7 JB	1	1
D1385	HDM0140	Diode MTZ 4.7 JB	1	1
D1386	HDS0437	Diode 1SS133	1	1
D1388	HDS0437	Diode 1SS133	1	1
D1408	HDS0437	Diode 1SS133	1	1
D1410	HDS0437	Diode 1SS133	1	1
R1320	RCE0762	R, Carbon 1/4W 270Ω ±5%	1	1
R1322	RCE0773	R, Carbon 1/4W 2.2kΩ ±5%	1	1
R1323	RME1067	R, Metal 1/4W 392Ω ±1%	1	1
R1324	RME1370	R, Metal 1/4W 3.01kΩ ±1%	1	1
R1325	RCE0761	R, Carbon 1/4W 220Ω ±5%	1	1
R1326	RCE0761	R, Carbon 1/4W 220Ω ±5%	1	1
R1327	RCE0765	R, Carbon 1/4W 470Ω ±5%	1	1
R1328	RME1078	R, Metal 1/4W 3.32kΩ ±1%	1	1
R1329	RCE0745	R, Carbon 1/4W 10Ω ±5%	1	1
R1330	RCE0775	R, Carbon 1/4W 3.3kΩ ±5%	1	1
R1331	RME1070	R, Metal 1/4W 681Ω ±1%	1	1
R1332	RME1070	R, Metal 1/4W 681Ω ±1%	1	1
R1333	RCE0781	R, Carbon 1/4W 10kΩ ±5%	1	1
R1334	RCE0777	R, Carbon 1/4W 4.7kΩ ±5%	1	1
R1335	RCE0785	R, Carbon 1/4W 22kΩ ±5%	1	1
R1336	RME1074	R, Metal 1/4W 1.50kΩ ±1%	1	1
R1337	RME1073	R, Metal 1/4W 1.21kΩ ±1%	1	1
R1338	RME1068	R, Metal 1/4W 475Ω ±1%	1	1
R1339	RCE0765	R, Carbon 1/4W 470Ω ±5%	1	1
R1340	RCE0775	R, Carbon 1/4W 3.3kΩ ±5%	1	1
R1341	RCE0749	R, Carbon 1/4W 22Ω ±5%	1	1
R1342	RME1066	R, Metal 1/4W 332Ω ±1%	1	1
R1343	RCE0760	R, Carbon 1/4W 180Ω ±5%	1	1
R1344	RME1066	R, Metal 1/4W 332Ω ±1%	1	1

Symbol	Part Code	Description	Q'ty A	Q'ty B
R1345B	RME1066	R, Metal 1/4W 332Ω ±1%	1	1
R1346	RME1121	R, Metal 1/4W 1.37kΩ ±1%	1	1
R1347	RME1066	R, Metal 1/4W 332Ω ±1%	1	1
R1348	RME1076	R, Metal 1/4W 2.21kΩ ±1%	1	1
R1349	RCE0833	R, Carbon 1/4W 240kΩ ±5%	1	1
R1350	RCE0773	R, Carbon 1/4W 2.2kΩ ±5%	1	1
R1351	RCE0771	R, Carbon 1/4W 1.5kΩ ±5%	1	1
R1352	RCE0771	R, Carbon 1/4W 1.5kΩ ±5%	1	1
R1353	RCE0773	R, Carbon 1/4W 2.2kΩ ±5%	1	1
R1354	RCE0757	R, Carbon 1/4W 100Ω ±5%	1	1
R1355	RME1075	R, Metal 1/4W 1.82kΩ ±1%	1	1
R1356	RME1075	R, Metal 1/4W 1.82kΩ ±1%	1	1
R1358	RME1074	R, Metal 1/4W 1.50kΩ ±1%	1	1
R1359	RME1074	R, Metal 1/4W 1.50kΩ ±1%	1	1
R1360	RCE0771	R, Carbon 1/4W 1.5kΩ ±5%	1	1
R1361	RME1085	R, Metal 1/4W 12.1kΩ ±1%	1	1
R1362	RME1072	R, Metal 1/4W 1.00kΩ ±1%	1	1
R1363	RME1075	R, Metal 1/4W 1.82kΩ ±1%	1	1
R1364	RME1078	R, Metal 1/4W 3.32kΩ ±1%	1	1
R1365	RME1072	R, Metal 1/4W 1.00kΩ ±1%	1	1
R1366	RME1088	R, Metal 1/4W 22.1kΩ ±1%	1	1
R1367	RCE0757	R, Carbon 1/4W 100Ω ±5%	1	1
R1368	RME1060	R, Metal 1/4W 100Ω ±1%	1	1
R1369	RME1066	R, Metal 1/4W 332Ω ±1%	1	1
R1370	RME1066	R, Metal 1/4W 332Ω ±1%	1	1
R1371	RCE0773	R, Carbon 1/4W 2.2kΩ ±5%	1	1
R1371A	RME1068	R, Metal 1/4W 475Ω ±1%	1	1
R1372	RCE0757	R, Carbon 1/4W 100Ω ±5%	1	1
R1374	RME1063	R, Metal 1/4W 182Ω ±1%	1	1
R1375	RME1063	R, Metal 1/4W 182Ω ±1%	1	1
R1376	RCE0757	R, Carbon 1/4W 100Ω ±5%	1	1
R1377	RCE0773	R, Carbon 1/4W 2.2kΩ ±5%	1	1
R1378	RME1368	R, Metal 2W 10kΩ ±5%	1	1
R1379	RME1368	R, Metal 2W 10kΩ ±5%	1	1
R1380	RCE0771	R, Carbon 1/4W 1.5kΩ ±5%	1	1
R1381	RCE0771	R, Carbon 1/4W 1.5kΩ ±5%	1	1
R1382	RCE0765	R, Carbon 1/4W 470Ω ±5%	1	1
R1383	RCE0765	R, Carbon 1/4W 470Ω ±5%	1	1
R1384	RCE0789	R, Carbon 1/4W 47kΩ ±5%	1	1
R1385	RCE0429	R, Carbon 1/4W 2.2kΩ ±5%	1	1
R1386	RZZ0041	R, Fusing 1/4W 330Ω ±5%	1	1
R1387	RCE0429	R, Carbon 1/4W 2.2kΩ ±5%	1	1
R1388	RZZ0041	R, Fusing 1/4W 330Ω ±5%	1	1
R1389	RCE0769	R, Carbon 1/4W 1kΩ ±5%	1	1
R1390	RCE0745	R, Carbon 1/4W 10Ω ±5%	1	1
R1391	RCE0769	R, Carbon 1/4W 1kΩ ±5%	1	1
R1392	RCE0745	R, Carbon 1/4W 10Ω ±5%	1	1
R1393	RCE0753	R, Carbon 1/4W 47Ω ±5%	1	1
R1394	RCE0753	R, Carbon 1/4W 47Ω ±5%	1	1
R1395	RME1368	R, Metal 2W 10kΩ ±5%	1	1
R1396	RME1368	R, Metal 2W 10kΩ ±5%	1	1
R1397	RCE0759	R, Carbon 1/4W 150Ω ±5%	1	1
R1398	RCE0759	R, Carbon 1/4W 150Ω ±5%	1	1
R1401	RCE0781	R, Carbon 1/4W 10kΩ ±5%	1	1
R1402	RCE0775	R, Carbon 1/4W 3.3kΩ ±5%	1	1
R1403	RME1088	R, Metal 1/4W 22.1kΩ ±1%	1	1
R1404	RCE0765	R, Carbon 1/4W 470Ω ±5%	1	1
R1405	RCE0775	R, Carbon 1/4W 3.3kΩ ±5%	1	1
R1406	RME1092	R, Metal 1/4W 47.5kΩ ±1%	1	1

PEF-678 H OUT AMP, FOCUS AMP

Symbol	Part Code	Description				Q'ty A	Q'ty B
R1407	RME1094	R, Metal	1/4W	68.1kΩ	±1%	1	1
R1408	RME1081	R, Metal	1/4W	5.62kΩ	±1%	1	1
R1409	RME1081	R, Metal	1/4W	5.62kΩ	±1%	1	1
R1410	RME1079	R, Metal	1/4W	3.92kΩ	±1%	1	1
R1411	RME1074	R, Metal	1/4W	1.50kΩ	±1%	1	1
R1412	RME1083	R, Metal	1/4W	8.25kΩ	±1%	1	1
R1414	RME1090	R, Metal	1/4W	33.2kΩ	±1%	1	1
R1415	RCE0715	R, Carbon	1/2W	6.8kΩ	±5%	1	1
R1416	RCE0793	R, Carbon	1/4W	100kΩ	±5%	1	1
R1417	RCE0761	R, Carbon	1/4W	220Ω	±5%	1	1
R1418	RCE0800	R, Carbon	1/4W	470kΩ	±5%	1	1
R1419	RCE0800	R, Carbon	1/4W	470kΩ	±5%	1	1
R1420	RCE0799	R, Carbon	1/4W	390kΩ	±5%	1	1
R1424	RMV0005	R, Metal	1/2W	10MΩ	±5%	1	1
R1427	RCE0785	R, Carbon	1/4W	22kΩ	±5%	1	1
R1429	RCE0792	R, Carbon	1/4W	82kΩ	±5%	1	1
R1430	RCE0799	R, Carbon	1/4W	390kΩ	±5%	1	1
R1431	RCE0735	R, Carbon	1/2W	1MΩ	±5%	1	1
RT1353	HDE0058	Thermistor	ERT-D2ZHK332S			1	1
RV1320	RNE0073	VR, Metal	EVN 49C00YB22 (200)			1	1
RV1324	RNE0067	VR, Metal	EVN 49C00YB13 (1K)			1	1
RV1328	RNE0067	VR, Metal	EVN 49C00YB13 (1K)			1	1
RV1343	RNE0073	VR, Metal	EVN 49C00YB22 (200)			1	1
RV1350	RNE0077	VR, Metal	EVN 49C00YB23 (2K)			1	1
RV1351	RNE0071	VR, Metal	EVN 49C00YB52 (500)			1	1
RV1354	RNE0076	VR, Metal	EVN 49C00YB12 (100)			1	1
C1322	CCC1011	C, Ceramic	50V	33 pF	±5%	1	1
C1327	CCC1356	C, Ceramic	50V	470 pF	±10%	1	1
C1328	CES0133	C, AL Elyc	16V	47μF	±20%	1	
C1337	CCC1025	C, Ceramic	50V	100 pF	±10%	1	1
C1339	CCC1014	C, Ceramic	50V	47 pF	±5%	1	1
C1341	CCC1014	C, Ceramic	50V	47 pF	±5%	1	1
C1342	CES0133	C, AL Elyc	16V	47μF	±20%	1	1
C1349	CQA0122	C, Plastic	50V	0.047μF	±10%	1	1
C1363	CCC1030	C, Ceramic	50V	10000 pF	+80 −20%	1	1
C1370	CCC1030	C, Ceramic	50V	10000 pF	+80 −20%	1	1
C1371	CCC1133	C, Ceramic	50V	1 pF	±0.25pF	1	1
C1372	CCC1133	C, Ceramic	50V	1 pF	±0.25pF	1	1
C1376	CCC1004	C, Ceramic	50V	15 pF	±5%	1	1
C1377	CCC1004	C, Ceramic	50V	15 pF	±5%	1	1
C1378	CCD0272	C, Ceramic	500V	1 pF	±0.25pF	1	1
C1379	CCD0272	C, Ceramic	500V	1 pF	±0.25pF	1	1
C1381	CCC1007	C, Ceramic	50V	22 pF	±5%	1	1
C1382	CCC1007	C, Ceramic	50V	22 pF	±5%	1	1
C1383	CCC1007	C, Ceramic	50V	22 pF	±5%	1	1
C1385	CCD0287	C, Ceramic	500V	4700 pF	+100 −0%	1	1
C1386	CET0033	C, AL Elyc	160V	1μF	±20%	1	1
C1387	CCD0287	C, Ceramic	500V	4700 pF	+100 −0%	1	1
C1388	CET0033	C, AL Elyc	160V	1μF	±20%	1	1
C1390	CCC1030	C, Ceramic	50V	10000 pF	+80 −20%	1	1
C1392	CCC1030	C, Ceramic	50V	10000 pF	+80 −20%	1	1

Symbol	Part Code	Description				Q'ty A	Q'ty B
C1394	CES0133	C, AL Elyc	16V	47μF	±20%	1	1
C1403	CES0133	C, AL Elyc	16V	47μF	±20%	1	1
C1404	CCC1030	C, Ceramic	50V	10000 pF	+80 −20%	1	1
C1407	CCC1030	C, Ceramic	50V	10000 pF	+80 −20%	1	1
C1411	CCC0996	C, Ceramic	50V	2 pF	±0.25pF	1	1
C1412	CCC1030	C, Ceramic	50V	10000 pF	+80 −20%	1	1
C1415	CCC1030	C, Ceramic	50V	10000 pF	+80 −20%	1	1
C1416	CCC1030	C, Ceramic	50V	10000 pF	+80 −20%	1	1
C1418	CCD0231	C, Ceramic	2000V	4700 pF	+80 −20%	1	1
C1419	CCC1030	C, Ceramic	50V	10000 pF	+80 −20%	1	1
C1420	CCD0231	C, Ceramic	2000V	4700 pF	+80 −20%	1	1
CV1381		C, Variable	ECV-1ZW06x60			1	1
L1322	TLE0061	Coil	EL0606R-220K			1	1
L1334	TLE0067	Coil	EL0606R-680K			1	1
L1415	TLE0138	Coil	ELE-Y 681 KA			1	1
J1397	8193940	Pin	For Connector			1	1
J1398	8193940	Pin	For Connector			1	1
P1320	JBS0030	Connector	SSQ-7-AP-GB			1	1
P1321	JBS0030	Connector	SSQ-7-AP-GB			1	1
P1322	JBS0030	Connector	SSQ-7-AP-GB			1	1
P1420	JBB0021	Connector	B3B-XH-A			1	1
P1487	JBB0021	Connector	B3B-XH-A			1	1
TR1340	HTC0148	Transistor	2SC458C			1	1

PEF-679 CH1 INPUT CKT

Symbol	Part Code	Description				Q'ty A	Q'ty B
R3	RCE0754	R, Carbon	1/4W	56Ω	±5%	1	1
C1	CCC1030	C, Ceramic	50V	10000 pF	+80 −20%	1	1
C2	CQX0068	C, Plastic	400V	0.047 µF	±20%	1	1
C3	CCC1005	C, Ceramic	50V	18 pF	±5%	1	1
C4	CCC1030	C, Ceramic	50V	10000 pF	+80 −20%	1	1
C5	CCC1030	C, Ceramic	50V	10000 pF	+80 −20%	1	1
S1	8393985	SW, Lever	SLE623			1	1

PEF-680 CH3 and CH4 INPUT AMP

Symbol	Part Code	Description				Q'ty A	Q'ty B
TR313	HTK0110	Transistor	2SK332E			1	1
TR318	HTC0814	Transistor	2SC3355			1	1
TR320	HTA0290	Transistor	2SA1206			1	1
TR323	HTC0814	Transistor	2SC3355			1	1
TR363	HTK0110	Transistor	2SK332E			1	1
TR367	HTA0224	Transistor	2SA1029D			1	1
TR368	HTC0814	Transistor	2SC3355			1	1
TR370	HTA0290	Transistor	2SA1206			1	1
TR373	HTC0814	Transistor	2SC3355			1	1
TR375	HTC0148	Transistor	2SC458C			1	1
D309	HDS0477	Diode	1SS110			1	1
D359	HDS0477	Diode	1SS110			1	1
D375	HDS0437	Diode	1SS133			1	1
R300	RCE0755	R, Carbon	1/4W	68Ω	±5%	1	1
R302	RMS0048	R, Metal	1/2W	800kΩ	±0.5%	1	1
R303	RCE0745	R, Carbon	1/4W	10Ω	±5%	1	1
R307	RCE0761	R, Carbon	1/4W	220Ω	±5%	1	1
R308	RMS0C49	R, Metal	1/2W	1MΩ	±0.5%	1	1
R309	RCE0733	R, Carbon	1/2W	470kΩ	±5%	1	1

Symbol	Part Code	Description				Q'ty A	Q'ty B
R310	RCE0753	R, Carbon	1/4W	47Ω	±5%	1	1
R311	RME1216	R, Metal	1/4W	250kΩ	±0.5%	1	1
R312	RME1056	R, Metal	1/4W	47.5Ω	±1%	1	1
R313	RCE0753	R, Carbon	1/4W	47Ω	±5%	1	1
R314	RME1056	R, Metal	1/4W	47.5Ω	±1%	1	1
R315	RCE0753	R, Carbon	1/4W	47Ω	±5%	1	1
R316	RCE0773	R, Carbon	1/4W	2.2kΩ	±5%	1	1
R320	RCE0753	R, Carbon	1/4W	47Ω	±5%	1	1
R321	RCE0773	R, Carbon	1/4W	2.2kΩ	±5%	1	1
R322	RCE0753	R, Carbon	1/4W	47Ω	±5%	1	1
R323	RCE0753	R, Carbon	1/4W	47Ω	±5%	1	1
R324	RCE0770	R, Carbon	1/4W	1.2kΩ	±5%	1	1
R324A	RCE0759	R, Carbon	1/4W	150Ω	±5%	1	1
R325	RCE0758	R, Carbon	1/4W	120Ω	±5%	1	1
R326	RCE0753	R, Carbon	1/4W	47Ω	±5%	1	1
R330	RCE0755	R, Carbon	1/4W	68Ω	±5%	1	1
R347	RCE0753	R, Carbon	1/4W	47Ω	±5%	1	1
R348	RCE0773	R, Carbon	1/4W	2.2kΩ	±5%	1	1
R349	RME1107	R, Metal	1/4W	86.6Ω	±1%	1	1
R350	RCE0755	R, Carbon	1/4W	68Ω	±5%	1	1
R352	RMS0048	R, Metal	1/2W	800kΩ	±0.5%	1	1
R353	RCE0745	R, Carbon	1/4W	10Ω	±5%	1	1
R357	RCE0761	R, Carbon	1/4W	220Ω	±5%	1	1
R358	RMS0049	R, Metal	1/2W	1.00MΩ	±0.5%	1	1
R359	RCE0733	R, Carbon	1/2W	470kΩ	±5%	1	1
R360	RCE0753	R, Carbon	1/4W	47Ω	±5%	1	1
R361	RME1216	R, Metal	1/4W	250kΩ	±0.5%	1	1
R362	RME1056	R, Metal	1/4W	47.5Ω	±1%	1	1
R363	RCE0753	R, Carbon	1/4W	47Ω	±5%	1	1
R364	RME1056	R, Metal	1/4W	47.5Ω	±1%	1	1
R365	RCE0753	R, Carbon	1/4W	47Ω	±5%	1	1
R366	RCE0773	R, Carbon	1/4W	2.2kΩ	±5%	1	1
R367	RCE0771	R, Carbon	1/4W	1.5kΩ	±5%	1	1
R368	RCE0753	R, Carbon	1/4W	47Ω	±5%	1	1
R370	RCE0753	R, Carbon	1/4W	47Ω	±5%	1	1
R371	RCE0773	R, Carbon	1/4W	2.2kΩ	±5%	1	1
R372	RCE0753	R, Carbon	1/4W	47Ω	±5%	1	1
R373	RCE0753	R, Carbon	1/4W	47Ω	±5%	1	1
R374	RCE0770	R, Carbon	1/4W	1.2kΩ	±5%	1	1
R375	RCE0757	R, Carbon	1/4W	100Ω	±5%	1	1
R376	RCE0789	R, Carbon	1/4W	47kΩ	±5%	1	1
R378	RCE0785	R, Carbon	1/4W	22kΩ	±5%	1	1
R379	RCE0793	R, Carbon	1/4W	100kΩ	±5%	1	1
R380	RCE0755	R, Carbon	1/4W	68Ω	±5%	1	1
R386	RCE0758	R, Carbon	1/4W	120Ω	±5%	1	1
R390	RME0866	R, Metal, Chip	1/8W	150Ω	±5%	1	1
R397	RCE0753	R, Carbon	1/4W	47Ω	±5%	1	1
R398	RCE0773	R, Carbon	1/4W	2.2kΩ	±5%	1	1
R398B	RCE0755	R, Carbon	1/4W	68Ω	±5%	1	1
R398C	RCE0749	R, Carbon	1/4W	22Ω	±5%	1	1
RV338	8410400	VR, Carbon	EVJ-KAAP20B14			1	1
RV388	8410400	VR, Carbon	EVJ-KAAP20B14			1	1
C300	CCC1001	C, Ceramic	50V	8 pF	±0.5pF	1	1
C301	CQX0068	C, Plastic	400V	0.047 µF	±20%	1	1
C303	CCD0274	C, Ceramic	500V	3 pF	±0.25pF	1	1
C304	CCD0275	C, Ceramic	500V	5 pF	±0.25pF	1	1
C307	CCD0275	C, Ceramic	500V	5 pF	±0.25pF	1	1
C309	CCD0286	C, Ceramic	500V	1000 pF	+100 −0%	1	1

PEF-680 CH3 and CH4 INPUT AMP

Symbol	Part Code	Description	Q'ty A	Q'ty B
C313	CES0133	C, AL Elyc 16V 47μF ±20%	1	1
C314	CES0133	C, AL Elyc 16V 47μF ±20%	1	1
C320	CCC1030	C, Ceramic 50V 10000pF +80 -20%	1	1
C323	CCC1182	C, Ceramic 50V 1000pF ±10%	1	1
C326	CCC1001	C, Ceramic 50V 8pF ±0.5pF	1	1
C330	CCC0997	C, Ceramic 50V 3pF ±0.25pF	1	1
C347	CCC1030	C, Ceramic 50V 10000pF +80 -20%	1	1
C350	CCC1001	C, Ceramic 50V 8pF ±0.5pF	1	1
C351	CQX0068	C, Plastic 400V 0.047μF ±20%	1	1
C353	CCD0274	C, Ceramic 500V 3pF ±0.25pF	1	1
C354	CCD0275	C, Ceramic 500V 5pF ±0.25pF	1	1
C357	CCD0275	C, Ceramic 500V 5pF ±0.25pF	1	1
C359	CCD0286	C, eramic 500V 1000pF +100 -0%	1	1
C363	CES0133	C, AL Elyc 16V 47μF ±20%	1	1
C364	CES0133	C, AL Elyc 16V 47μF ±20%	1	1
C367	CES0133	C, AL Elyc 16V 47μF ±20%	1	1
C369	CCC1001	C, Ceramic 50V 8pF ±0.5pF	1	1
C370	CCC1030	C, Ceramic 50V 10000pF +80 -20%	1	1
C373	CCC1182	C, Ceramic 50V 1000pF ±10%	1	1
C375	CCC1030	C, Ceramic 50V 10000pF +80 -20%	1	1
C380	CCC0997	C, Ceramic 50V 3pF ±0.25pF	1	1
C381	CES0133	C, AL Elyc 16V 47μF ±20%	1	1
C397	CCC1030	C, Ceramic 50V 10000pF +80 -20%	1	1
CV305	CVE0046	C, Variable ECR-HA010A11	1	1
CV310	CVE0046	C, Variable ECR-HA010A11	1	1
CV355	CVE0046	C, Variable ECR-HA010A11	1	1
CV360	CVE0046	C, Variable ECR-HA010A11	1	1
K375	SRR0053	Relay NR-HD-12V (AE-5343)	1	1
S301,2	8410387A	SW, Push SUJ-20 (For CH3, CH4 Input)	1	1
S350,2	8410387A	SW, Push SUJ-20 (For CH3, CH4 Input)	1	1
P300	JBB0021	Connector B3B-XH-A	1	1
P304	JBC0095	Card Fit Conn. CF-007	1	1
P323	JBB0027	Connector B2B-XH-A	1	1
P330	JBC0099	Card Fit Conn. CF-015	1	1
P350	JBB0021	Connector B3B-XH-A	1	1
P373	JBB0027	Connector B2B-XH-A	1	1

PEF-681 DIGITAL CONTROL UNIT

Symbol	Part Code	Description	Q'ty A	Q'ty B
IC1601	8410398	IC LQV-4M09-012C	1	1
IC2003	ILN0042	IC, Analog NJM072S	1	1
IC2004	IDT0055	IC, Digital TC40H374F	1	1
IC2005	IDT0043	IC, Digital TC40H244P	1	1
IC2006	IDT0043	IC, Digital TC40H244P	1	
IC2007	IDT0043	IC, Digital TC40H244P	1	1
IC2011	IDM0478	IC, Digital μPD780C	1	1
IC2012	IDT0048	IC, Digital TC40H004P	1	1
IC2013	IDH0923	IC, Digital HN482764G-4	1	1
IC2014	IDT0041	IC, Digital TC40H138P	1	1
IC2015	IDT0041	IC, Digital TC40H138P	1	
IC2016	IDT0041	IC, Digital TC40H138P	1	1
IC2017	IDT0041	IC, Digital TC40H138P	1	1
IC2018	IDM0514	IC, Digital μPD446C-2	1	1
IC2020	IDT0055	IC, Digital TC40H374P	1	1
IC2021	IDT0055	IC, Digital TC40H374P	1	1
IC2022	ILN0042	IC, Analog NJM072S	1	1
IC2023	IDM0483	IC, Digital MB88301A	1	1
IC2033	IDT0045	IC, Digital TC40H259P	1	1
IC2034	IDT0045	IC, Digital TC40H259P	1	1
IC2040	ILU0010	IC, Analog UN4213	1	
IC2045	IDT0045	IC, Digital TC40H259P	1	1
IC2047	IDT0055	IC, Digital TC40H374P	1	
IC2048	IDT0055	IC, Digital TC40H374P	1	
IC2101	IDT0118	IC, Digital TC74HC86P	1	1
IC2102	IDH0923	IC, Digital HN482764G-4	1	
IC2103	IDT0039	IC, Digital TC40H000P	1	1
IC2104	IDT0047	IC, Digital TC40H002P	1	1
IC2105	IDT0048	IC, Digital TC40H004P	1	1
IC2106	IDM0515	IC, Digital MM74HC123N	1	1
IC2113	IDM0514	IC, Digital μPD446C-2	1	1
IC2114	IDT0044	IC, Digital TC40H245P	1	1
IC2115	IDT0096	IC, Digital TC40H151P	1	1
IC2120	IDT0098	IC, Digital TC40H051P	1	1
IC2121	IDT0124	IC, Digital TC74HC393P	1	1
IC2122	IDT0124	IC, Digital TC74HC393P	1	1
IC2123	IDT0049	IC, Digital TC40H164P	1	1
IC2127	IDT0119	IC, Digital TC40H020P	1	1
IC2140	ILH0123	IC, Analog HA17408P	1	1
IC2141	IZH0018	IC, Hybrid HA17012PB	1	
IC2142	IDH0801	IC, Digital HD14052BP (MC14052BCP)	1	
IC2143	ILN0042	IC, Analog NJM072S	1	1
IC2154	ILN0042	IC, Analog NJM072S	1	1
IC2154A	ILN0042	IC, Analog NJM072S	1	1
	IYX0041	IC, Socket 10628-01-445	2	1
	IYT0003	Seal 11 X 11 mm T type Metalic	2	1
TR1605	HTA0224	Transistor 2SA1029D	1	1
TR2031	HTA0224	Transistor 2SA1029D	1	1
TR2072	HTA0224	Transistor 2SA1029D	1	1
TR2073	HTA0224	Transistor 2SA1029D	1	1
TR2118	HTA0224	Transistor 2SA1029D	1	
TR2119	HTC0148	Transistor 2SC458C	1	
TR2158	HTA0224	Transistor 2SA1029D	1	1
TR2172	HTA0224	Transistor 2SA1029D	1	1
TR2173	HTA0224	Transistor 2SA1029D	1	1
D2005	HDS0437	Diode 1SS133	1	1
D2008	HDX0055	Diode 1SS165	1	1
D2009	HDS0437	Diode 1SS133	1	1
D2010	HDS0437	Diode 1SS133	1	1

PEF-681 DIGITAL CONTROL UNIT

Symbol	Part Code	Description	Q'ty A	Q'ty B
D2012	HDS0437	Diode 1SS133	1	1
D2013	HDS0437	Diode 1SS133	1	1
D2014	HDS0437	Diode 1SS133	1	1
D2015	HDS0437	Diode 1SS133	1	1
D2016	HDS0437	Diode 1SS133	1	1
D2031	HDM0051	Diode MA161	1	1
D2034	HDM0051	Diode MA161	1	1
D2040	HDS0437	Diode 1SS133	1	
D2118	HDS0437	Diode 1SS133	1	
D2119	HDM0139	Diode MTZ 3.3 JA	1	
R1602	RCE0793	R, Carbon 1/4W 100kΩ ±5%	1	1
R1603	RCE0783	R, Carbon 1/4W 15kΩ ±5%	1	1
R1604	RCE0777	R, Carbon 1/4W 4.7kΩ ±5%	1	1
R1606	RME1123	R, Metal 1/4W 2.43kΩ ±1%	1	1
R1607	RME1112	R, Metal 1/4W 301Ω ±1%	1	1
R1608	RCE0789	R, Carbon 1/4W 47kΩ ±5%	1	1
R1609	RCE0745	R, Carbon 1/4W 10Ω ±5%	1	1
R1621	RME0872	R, Metal, Chip 1/8W 470Ω ±5%	1	1
R2003	RCE0745	R, Carbon 1/4W 10Ω ±5%	1	1
R2004	RME1157	R, Metal 1/4W 16.0kΩ ±0.5%	1	1
R2004A	RCE0781	R, Carbon 1/4W 10kΩ ±5%	1	1
R2005	RME1206	R, Metal 1/4W 66.5kΩ ±1%	1	1
R2005A	RCE0737	R, Carbon 1/2W 1.8MΩ ±5%	1	1
R2006	RCE0781	R, Carbon 1/4W 10kΩ ±5%	1	1
R2007	RCE0781	R, Carbon 1/4W 10kΩ ±5%	1	1
R2008	RCE0789	R, Carbon 1/4W 47kΩ ±5%	1	1
R2008A	RCE0789	R, Carbon 1/4W 47kΩ ±5%	1	1
R2010	RCE0793	R, Carbon 1/4W 100kΩ ±5%	1	1
R2011	RME1214	R, Metal 1/4W 50.0kΩ ±0.5%	1	1
R2012	RME1096	R, Metal 1/4W 100kΩ ±1%	1	1
R2013	RME1208	R, Metal 1/4W 200kΩ ±1%	1	1
R2014	RCE0757	R, Carbon 1/4W 100Ω ±5%	1	1
R2016	RCE0765	R, Carbon 1/4W 470Ω ±5%	1	1
R2023	RCE0745	R, Carbon 1/4W 10Ω ±5%	1	1
R2024	RCE0745	R, Carbon 1/4W 10Ω ±5%	1	1
R2025	RME1212	R, Metal 1/4W 20.0kΩ ±0.5%	1	1
R2026	RME1086	R, Metal 1/4W 15.0kΩ ±1%	1	1
R2027	RME1217	R, Metal 1/4W 800kΩ ±0.5%	1	1
R2028	RME0864	R, Metal, Chip 1/8W 100Ω ±5%	1	1
R2029	RCE0802	R, Carbon 1/4W 1MΩ ±5%	1	1
R2030	RME1217	R, Metal 1/4W 800kΩ ±0.5%	1	1
R2031	RME1075	R, Metal 1/4W 1.82kΩ ±1%	1	1
R2032	RME1080	R, Metal 1/4W 4.75kΩ ±1%	1	1
R2033	RCE0779	R, Carbon 1/4W 6.8kΩ ±5%	1	1
R2034	RME1086	R, Metal 1/4W 15.0kΩ ±1%	1	1
R2035	RCE0745	R, Carbon 1/4W 10Ω ±5%	1	1
R2036	RME0892	R, Metal, Chip 1/8W 22kΩ ±5%	1	1
R2037	RME1096	R, Metal 1/4W 100kΩ ±1%	1	1
R2038	RCE0781	R, Carbon 1/4W 10kΩ ±5%	1	1
R2039	RCE0771	R, Carbon 1/4W 1.5kΩ ±5%	1	1
R2040	RCE0777	R, Carbon 1/4W 4.7kΩ ±5%	1	
R2041	RME0864	R, Metal, Chip 1/8W 100Ω ±5%	1	1
R2070	RCE0769	R, Carbon 1/4W 1kΩ ±5%	1	1
R2071	RCE0777	R, Carbon 1/4W 4.7kΩ ±5%	1	1
R2071A	RCE0769	R, Carbon 1/4W 1kΩ ±5%	1	1
R2072	RCE0785	R, Carbon 1/4W 22kΩ ±5%	1	1
R2073	RME1084	R, Metal 1/4W 10.0kΩ ±1%	1	1
R2116	RCE0755	R, Carbon 1/4W 68Ω ±5%	1	
R2117	RCE0773	R, Carbon 1/4W 2.2kΩ ±5%	1	
R2118	RME0870	R, Metal, Chip 1/8W 330Ω ±5%	1	
R2119	RCE0762	R, Carbon 1/4W 270Ω ±5%	1	

Symbol	Part Code	Description	Q'ty A	Q'ty B
R2120	RCE0776	R, Carbon 1/4W 3.9kΩ ±5%	1	
R2124	RCE0769	R, Carbon 1/4W 1kΩ ±5%	1	1
R2138	RCE0772	R, Carbon 1/4W 1.8kΩ ±5%	1	1
R2139	RME1084	R, Metal 1/4W 10.0kΩ ±1%	1	
R2140	RME1078	R, Metal 1/4W 3.32kΩ ±1%	1	1
R2141	RCE0749	R, Carbon 1/4W 22Ω ±5%	1	
R2142A	RME1085	R, Metal 1/4W 12.1kΩ ±1%	1	
R2142B	RME1075	R, Metal 1/4W 1.82kΩ ±1%	1	
R2143	RCE0769	R, Carbon 1/4W 1kΩ ±5%	1	
R2144	RME1082	R, Metal 1/4W 6.81kΩ ±1%	1	
R2146	RME1071	R, Metal 1/4W 825Ω ±1%	1	
R2147	RCE0769	R, Carbon 1/4W 1kΩ ±5%	1	1
R2147A	RME0872	R, Metal, Chip 1/8W 470Ω ±5%	1	1
R2148	RME1078	R, Metal 1/4W 3.32kΩ ±1%	1	1
R2149	RME1078	R, Metal 1/4W 3.32kΩ ±1%	1	1
R2150	RME1116	R, Metal 1/4W 619Ω ±1%	1	1
R2150A	RME0872	R, Metal, Chip 1/8W 470Ω ±5%	1	1
R2151	RME0884	R, Metal, Chip 1/8W 4.7kΩ ±5%	1	1
R2152	RME0906	R, Metal, Chip 1/8W 1.0MΩ ±5%	1	1
R2153	RCE0777	R, Carbon 1/4W 4.7kΩ ±5%	1	1
R2154	RCE0787	R, Carbon 1/4W 33kΩ ±5%	1	1
R2155	RCE0782	R, Carbon 1/4W 12kΩ ±5%	1	1
R2156	RME0900	R, Metal, Chip 1/8W 100kΩ ±5%	1	1
R2157	RME0876	R, Metal, Chip 1/8W 1kΩ ±5%	1	1
R2158	RME0889	R, Metal, Chip 1/8W 12kΩ ±5%	1	1
R2160	RME0896	R, Metal, Chip 1/8W 47kΩ ±5%	1	1
R2161	RME0904	R, Metal, Chip 1/8W 470kΩ ±5%	1	1
R2161A	RME0868	R, Metal, Chip 1/8W 220Ω ±5%	1	1
R2163A	RME0868	R, Metal, Chip 1/8W 220Ω ±5%	1	1
R2164	RME0852	R, Metal, Chip 1/8W 10Ω ±5%	1	1
R2165	RME0852	R, Metal, Chip 1/8W 10Ω ±5%	1	1
R2166	RME0852	R, Metal, Chip 1/8W 10Ω ±5%	1	1
R2167	RME0852	R, Metal, Chip 1/8W 10Ω ±5%	1	1
R2170	RME0876	R, Metal, Chip 1/8W 1kΩ ±5%	1	1
R2171	RME0884	R, Metal, Chip 1/8W 4.7kΩ ±5%	1	1
R2171A	RCE0769	R, Carbon 1/4W 1kΩ ±5%	1	1
R2172	RME0892	R, Metal, Chip 1/8W 22kΩ ±5%	1	1
R2173	RME1084	R, Metal 1/4W 10.0kΩ ±1%	1	1
R2180	RME1096	R, Metal 1/4W 100kΩ ±1%	1	1
R2181	RCE0815	R, Carbon 1/4W 200kΩ ±5%	1	1
R2182A	RCE0815	R, Carbon 1/4W 200kΩ ±5%	1	1
R2182B	RCE0815	R, Carbon 1/4W 200kΩ ±5%	1	1
R2183	RME1214	R, Metal 1/4W 50.0kΩ ±0.5%	1	1
R2184A	RME1088	R, Metal 1/4W 22.1kΩ ±1%	1	1
R2184B	RCE0774	R, Carbon 1/4W 2.7kΩ ±5%	1	1
R2185A	RME1077	R, Metal 1/4W 2.67kΩ ±1%	1	1
R2185B	RCE0755	R, Carbon 1/4W 68Ω ±5%	1	1
R2186	RME1193	R, Metal 1/4W 11.0kΩ ±1%	1	1
R2186A	RME0876	R, Metal, Chip 1/8W 1kΩ ±5%	1	1
R2187	RME1074	R, Metal 1/4W 1.50kΩ ±1%	1	1
R2187A	RME0872	R, Metal, Chip 1/8W 470Ω ±5%	1	1
R3501	RCE0769	R, Carbon 1/4W 1kΩ ±5%	1	1
R3502	RCE0769	R, Carbon 1/4W 1kΩ ±5%	1	1
R3503	RCE0769	R, Carbon 1/4W 1kΩ ±5%	1	1
R3504	RCE0769	R, Carbon 1/4W 1kΩ ±5%	1	1
R3505	RCE0769	R, Carbon 1/4W 1kΩ ±5%	1	1
R3506	RME0876	R, Metal, Chip 1/8W 1kΩ ±5%	1	
R3507	RME0876	R, Metal, Chip 1/8W 1kΩ ±5%	1	
R3508	RME0876	R, Metal, Chip 1/8W 1kΩ ±5%	1	
R3509	RME0876	R, Metal, Chip 1/8W 1kΩ ±5%	1	
R3510	RCE0769	R, Carbon 1/4W 1kΩ ±5%	1	

PEF-681 DIGITAL CONTROL UNIT

Symbol	Part Code	Description	Q'ty A	Q'ty B
R3511	RCE0769	R, Carbon 1/4W 1kΩ ±5%	1	
R3512	RME0876	R, Metal, Chip 1/8W 1kΩ ±5%	1	
R3513	RCE0769	R, Carbon 1/4W 1kΩ ±5%	1	
R3516	RME0864	R, Metal, Chip 1/8W 100Ω ±5%	1	1
R3517	RCE0757	R, Carbon 1/4W 100Ω ±5%	1	1
R3518	RCE0757	R, Carbon 1/4W 100Ω ±5%	1	1
R3518A	RME0872	R, Metal, Chip 1/8W 470Ω ±5%	1	1
R3519	RCE0757	R, Carbon 1/4W 100Ω ±5%	1	1
R3519A	RCE0765	R, Carbon 1/4W 470Ω ±5%	1	1
R3519B	RCE0757	R, Carbon 1/4W 100Ω ±5%	1	1
R3520	RCE0777	R, Carbon 1/4W 4.7kΩ ±5%	1	1
RM2005	RZA0115	R, Block EXB-P8-8-473-J	1	1
RM2006	RZA0115	R, Block EXB-P8-8-473-J	1	
RM2007	RZA0115	R, Block EXB-P8-8-473-J	1	1
RM2010	RZA0115	R, Block EXB-P8-8-473-J	1	1
RM2011	RZA0115	R, Block EXB-P8-8-473-J	1	1
RM2012	RZA0115	R, Block EXB-P8-8-473-J	1	1
RM2020	RZA0104	R, Block EXB-P8-8-472-J	1	1
RV1606	RNE0071	VR, Metal EVN 49C00YB52 (500)	1	1
C1601	CES0133	C, AL Elyc 16V 47μF ±20%	1	1
C1605	CES0133	C, AL Elyc 16V 47μF ±20%	1	1
C1607	CCG0207	C, Ceramic Chip 50V 2200 pF ±10%	1	1
C2003	CES0133	C, AL Elyc 16V 47μF ±20%	1	1
C2004	CCC1136	C, Ceramic 50V 100 pF ±5%	1	1
C2005	CCC1030	C, Ceramic 50V 10000 pF +80 -20%	1	1
C2006	CCC1030	C, Ceramic 50V 10000 pF +80 -20%	1	
C2007	CCC1030	C, Ceramic 50V 10000 pF +80 -20%	1	1
C2008	CES0133	C, AL Elyc 16V 47μF ±20%	1	1
C2009	CES0133	C, AL Elyc 16V 47μF ±20%	1	1
C2010	CES0133	C, AL Elyc 16V 47μF ±20%	1	1
C2011	CQA0122	C, Plastic 50V 0.047μF ±10%	1	1
C2012	CES0133	C, AL Elyc 16V 47μF ±20%	1	1
C2013	CQA0122	C, Plastic 50V 0.047μF ±10%	1	1
C2013A	CES0133	C, AL Elyc 16V 47μF ±20%	1	1
C2014	CCC1030	C, Ceramic 50V 10000 pF +80 -20%	1	1
C2015	CCC1030	C, Ceramic 50V 10000 pF +80 -20%	1	
C2016	CCC1030	C, Ceramic 50V 10000 pF +80 -20%	1	1
C2017	CCC1030	C, Ceramic 50V 10000 pF +80 -20%	1	1
C2018	CQA0122	C, Plastic 50V 0.047μF ±10%	1	1
C2018A	CES0133	C, AL Elyc 16V 47μF ±20%	1	1
C2020	CCC1030	C, Ceramic 50V 10000 pF +80 -20%	1	1
C2021	CCC1030	C, Ceramic 50V 10000 pF +80 -20%	1	1
C2022	CCC1030	C, Ceramic 50V 10000 pF +80 -20%	1	1
C2023	CES0133	C, AL Elyc 16V 47μF ±20%	1	1
C2024	CES0133	C, AL Elyc 16V 47μF ±20%	1	1
C2025	CQA0124	C, Plastic 50V 0.1μF ±10%	1	1
C2027	CQA0122	C, Plastic 50V 0.047μF ±10%	1	1
C2030	CQA0124	C, Plastic 50V 0.1μF ±10%	1	1
C2031	CQA0124	C, Plastic 50V 0.1μF ±10%	1	1
C2033	CCG0211	C, Ceramic, Chip 50V 10000pF ±10%	1	1
C2034	CCG0211	C, Ceramic, Chip 50V 10000pF ±10%	1	1
C2035	CCG0211	C, Ceramic, Chip 50V 10000pF ±10%	1	1
C2038	CET0033	C, AL Elyc 160V 1μF ±20%	1	1
C2039	CET0033	C, AL Elyc 160V 1μF ±20%	1	1
C2045	CCG0211	C, Ceramic, Chip 50V 10000pF ±10%	1	1

Symbol	Part Code	Description	Q'ty A	Q'ty B
C2047	CCC1030	C, Ceramic 50V 10000 pF +80 -20%	1	
C2048A	CES0133	C, AL Elyc 16V 47μF ±20%	1	
C2074	CQA0124	C, Plastic 50V 0.1μF ±10%	1	1
C2101	CCG0211	C, Ceramic Chip 50V 10000 pF ±10%	1	1
C2102	CQA0122	C, Plastic 50V 0.047μF ±10%	1	
C2102A	CES0133	C, AL Elyc 16V 47μF ±20%	1	
C2103	CCG0211	C, Ceramic, Chip 50V 10000pF ±10%	1	1
C2104	CCG0211	C, Ceramic, Chip 50V 10000pF ±10%	1	1
C2105	CCG0211	C, Ceramic, Chip 50V 10000pF ±10%	1	1
C2106	CCG0211	C, Ceramic, Chip 50V 10000pF ±10%	1	1
C2113	CQA0122	C, Plastic 50V 0.047μF ±10%	1	1
C2113A	CES0133	C, AL Elyc 16V 47μF ±20%	1	1
C2114	CCC1030	C, Ceramic 50V 10000 pF +80 -20%	1	1
C2115	CCC1030	C, Ceramic 50V 10000 pF +80 -20%	1	1
C2116	CDE0001	C, 2-Layer EECW5R5F473 (0.047F)	1	
C2120	CCC1030	C, Ceramic 50V 10000 pF +80 -20%	1	1
C2121	CCG0211	C, Ceramic, Chip 50V 10000pF ±10%	1	1
C2122A	CES0133	C, AL Elyc 16V 47μF ±20%	1	1
C2123	CCG0211	C, Ceramic Chip 50V 10000 pF ±10%	1	1
C2124	CCC1011	C, Ceramic 50V 33 pF ±5%	1	1
C2127	CCG0211	C, Ceramic Chip 50V 10000 pF ±10%	1	1
C2138	CCG0141	C, Ceramic, Chip 50V 68 pF ±5%	1	1
C2139	CCC1030	C, Ceramic 50V 10000 pF +80 -20%	1	
C2140	CCC1030	C, Ceramic 50V 10000 pF +80 -20%	1	1
C2141	CES0133	C, AL Elyc 16V 47μF ±20%	1	
C2142	CES0133	C, AL Elyc 16V 47μF ±20%	1	
C2143	CCG0211	C, Ceramic, Chip 50V 10000pF ±10%	1	
C2143A	CES0133	C, AL Elyc 16V 47μF ±20%	1	
C2144	CES0133	C, AL Elyc 16V 47μF ±20%	1	1
C2145	CCC1182	C, Ceramic 50V 1000 pF ±10%	1	
C2146	CCC1136	C, Ceramic 50V 100 pF ±5%	1	1
C2146A	CCC1356	C, Ceramic 50V 470 pF ±10%	1	1
C2147	CCC1136	C, Ceramic 50V 100 pF ±5%	1	1
C2147A	CCG0201	C, Ceramic, Chip 50V 470 pF ±5%	1	1
C2148	CCC1136	C, Ceramic 50V 100 pF ±5%	1	1
C2149	CES0133	C, AL Elyc 16V 47μF ±20%	1	1
C2150	CES0133	C, AL Elyc 16V 47μF ±20%	1	1
C2151	CQA0125	C, Plastic 50V 0.0047μF ±10%	1	1
C2152	CCG0144	C, Ceramic, Chip 50V 220 pF ±5%	1	1
C2154	CQA0125	C, Plastic 50V 0.0047μF ±10%	1	1
C2159	CCG0205	C, Ceramic, Chip 50V 1000 pF ±10%	1	1
C2165	CES0133	C, AL Elyc 16V 47μF ±20%	1	1
C2174	CQA0124	C, Plastic 50V 0.1μF ±10%	1	1
C2501	CES0133	C, AL Elyc 16V 47μF ±20%	1	1
C2502	CES0133	C, AL Elyc 16V 47μF ±20%	1	1
C2503	CES0133	C, AL Elyc 16V 47μF ±20%	1	1
C2504	CES0133	C, AL Elyc 16V 47μF ±20%	1	1
C3501	CCC1030	C, Ceramic 50V 10000 pF +80 -20%	1	1
L1605	TLE0058	Coil EL0606R-100K	1	1
L2009	TLE0058	Coil EL0606R-100K	1	1
L2011	TLE0086	Coil EL0606R-2R2M	1	1
L2048	TLE0058	Coil EL0606R-100K	1	
L2122	TLE0058	Coil EL0606R-100K	1	1
L2124	TLE0063	Coil EL0606R-330K	1	1
L2142	TLE0058	Coil EL0606R-100K	1	
BB2	ETZ0112	Minibus NC3524-05	1	1
BB3	ETZ0111	Minibus NC3522-01	1	1

PEF-681 DIGITAL CONTROL UNIT

Symbol	Part Code	Description	Q'ty A	Q'ty B
P1606	JBB0027	Connector B2B-XH-A	1	1
P1607	JBB0027	Connector B2B-XH-A	1	1
P2001	JBC0101	Card Fit Conn. CF-019	1	1
P2002	JBC0096	Card Fit Conn. CF-009	1	1
P2003	JBC0101	Card Fit Conn. CF-019	1	1
P2004	JBC0096	Card Fit Conn. CF-009	1	1
P2006	JBC0092	Card Fit Conn. CF-020	1	1
P2008	JBB0022	Connector B6B-XH-A	1	1
P2009	JBB0027	Connector B2B-XH-A	1	
P2010	JBB0022	Connector B6B-XH-A	1	1
P2011	JBC0100	Card Fit Conn. CF-017	1	1
P2012	JBB0028	Connector B4B-XH-A	1	1
P2014	JBB0027	Connector B2B-XH-A	1	1
P2015	JBB0026	Connector B10P-XH-A	1	1
P2020	JBB0032	Connector B14P-SHF-GB	1	
P2030	JBB0033	Connector B16P-SHF-GB	1	
CL2006	AFD0010	Filter DST310-55D223S	1	1
CL2010	AFD0010	Filter DST310-55D223S	1	1
R3530	RME0912	R, Metal, Chip Zero Ohm Resistor	1	
R3531	RME0912	R, Metal, Chip Zero Ohm Resistor	1	
R3532	RME0912	R, Metal, Chip Zero Ohm Resistor	1	
R3533	RME0912	R, Metal, Chip Zero Ohm Resistor	1	
R3534	RME0912	R, Metal, Chip Zero Ohm Resistor	1	
R3535	RME0912	R, Metal, Chip Zero Ohm Resistor	1	
R3536	RCE0769	R, Carbon 1/4W 1kΩ ±5%	1	1
R3537	RCE0769	R, Carbon 1/4W 1kΩ ±5%	1	1
L2009	TLE0058	Coil EL0606R-100K	1	1

PEF-682 V MODE and H MODE SWITCH

Symbol	Part Code	Description	Q'ty A	Q'ty B
TR2583	HTA0224	Transistor 2SA1029D	1	1
D2574	HDS0437	Diode 1SS133	1	1
D2580	HDS0437	Diode 1SS133	1	1
D2590	HDS0437	Diode 1SS133	1	1
R2572	RME1205	R, Metal 1/4W 49.9kΩ ±1%	1	1
R2573	RCE0815	R, Carbon 1/4W 200kΩ ±5%	1	1
R2574	RCE0769	R, Carbon 1/4W 1kΩ ±5%	1	1
R2580	RME1205	R, Metal 1/4W 49.9kΩ ±1%	1	1
R2581	RME1096	R, Metal 1/4W 100kΩ ±1%	1	1
R2582	RCE0815	R, Carbon 1/4W 200kΩ ±5%	1	1
R2583	RCE0789	R, Carbon 1/4W 47kΩ ±5%	1	1
R2584	RCE0785	R, Carbon 1/4W 22kΩ ±5%	1	1
R2590	RCE0815	R, Carbon 1/4W 200kΩ ±5%	1	1
R2591	RME1205	R, Metal 1/4W 49.9kΩ ±1%	1	1
R2592	RME1096	R, Metal 1/4W 100kΩ ±1%	1	1

Symbol	Part Code	Description	Q'ty A	Q'ty B
S461-5	8410387C	SW, Push SUJ-60 (For V. Mode)	1	1
S1121-4	8410387B	SW, Push SUJ-40 (For H. Mode)	1	1
P401	JBC0104	Card Fit Conn. CF-111	1	1
P1126	JBC0103	Card Fit Conn. CF-109	1	1

PEF-683 POSITION CONTROL

Symbol	Part Code	Description	Q'ty A	Q'ty B
R73	RCE0770	R, Carbon 1/4W 1.2kΩ ±5%	1	1
R173	RCE0770	R, Carbon 1/4W 1.2kΩ ±5%	1	1
R175	RCE0761	R, Carbon 1/4W 220Ω ±5%	1	1
R571	RCE0777	R, Carbon 1/4W 4.7kΩ ±5%	1	1
RV71	8348452	VR, Carbon EVH-CCAK20B14(10kΩ)	1	1
RV171	RDE0003	VR, Carbon EVH-YK3325B14 (10kΩ)	1	1
RV570	8348452	VR, Carbon EVH-CCAK20B14(10kΩ)	1	1
RV1210	3142080A	VR, Carbon 16 Type 10KB+50KB with SW	1	1
RV1300	3142080A	VR, Carbon 16 Type 10KB+50KB with SW	1	1
P71	JBC0105	Card Fit Conn. CF-113	1	1

PEF-684 CURSOR and DVM SWITCH

Symbol	Part Code	Description	Q'ty A	Q'ty B
RV2701	8410393	VR, Carbon EWK-ANAS 10K+10K	1	1
S2701	8410390	SW, Moment SBM-Type Moment+Pull-Push	1	1
S2702-6	8410387E	SW, Push SUJ-50 (For DVM)	1	
S2707	SSL0072	SW, Lever A-22KV	1	
	SSY0456	Lever AT-467 (Black)	1	
P2601	JBC0106	Card Fit Conn. CF-117	1	1

PEF-685 TRIGGER LED

Symbol	Part Code	Description	Q'ty A	Q'ty B
D2601	HDS0527	Diode SLB-26VR5F-G RED	1	1
D2602	HDS0527	Diode SLB-26VR5F-G RED	1	1
D2603	HDS0527	Diode SLB-26VR5F-G RED	1	1
D2604	HDS0527	Diode SLB-26VR5F-G RED	1	1
D2605	HDS0527	Diode SLB-26VR5F-G RED	1	1
D2606	HDS0527	Diode SLB-26VR5F-G RED	1	1
D2701	HDS0527	Diode SLB-26VR5F-G RED	1	1
D2702	HDS0527	Diode SLB-26VR5F-G RED	1	1
D2703	HDS0527	Diode SLB-26VR5F-G RED	1	1
D2704	HDS0527	Diode SLB-26VR5F-G RED	1	1
D2705	HDS0527	Diode SLB-26VR5F-G RED	1	1
D2706	HDS0527	Diode SLB-26VR5F-G RED	1	1
D2707	HDS0527	Diode SLB-26VR5F-G RED	1	1
D2708	HDS0527	Diode SLB-26VR5F-G RED	1	1
D2709	HDS0527	Diode SLB-26VR5F-G RED	1	1
D2710	HDS0527	Diode SLB-26VR5F-G RED	1	1
D2711	HDS0527	Diode SLB-26VR5F-G RED	1	1
D2712	HDS0527	Diode SLB-26VR5F-G RED	1	1
D2713	HDS0527	Diode SLB-26VR5F-G RED	1	1
D2714	HDS0527	Diode SLB-26VR5F-G RED	1	1
R2601	RCE0762	R, Carbon 1/4W 270Ω ±5%	1	1
R2603	RCE0761	R, Carbon 1/4W 220Ω ±5%	1	1
R2701	RCE0762	R, Carbon 1/4W 270Ω ±5%	1	1
R2702	RCE0762	R, Carbon 1/4W 270Ω ±5%	1	1
R2703	RCE0762	R, Carbon 1/4W 270Ω ±5%	1	1
R2705	RCE0762	R, Carbon 1/4W 270Ω ±5%	1	1

Symbol	Part Code	Description	Q'ty A	Q'ty B
R2706	RCE0761	R, Carbon 1/4W 220Ω ±5%	1	1
R2709	RCE0761	R, Carbon 1/4W 220Ω ±5%	1	1
R2710	RCE0762	R, Carbon 1/4W 270Ω ±5%	1	1
R2712	RCE0762	R, Carbon 1/4W 270Ω ±5%	1	1
R2714	RCE0761	R, Carbon 1/4W 220Ω ±5%	1	1
S2601	8410391	SW, Push SUV-1 Nonlock	1	1
S2602	SSL0071	SW, Lever A-18KB	1	1
S2603	SSL0071	SW, Lever A-18KB	1	1
S2604	SSL0071	SW, Lever A-18KB	1	1
S2605	8410391	SW, Push SUV-1 Nonlock	1	1
S2606	8410391	SW, Push SUV-1 Nonlock	1	1
	SSY0456	Lever AT-467 (Black)	3	3
P2710	JBB0031	Connector B8P-SHF-GB	1	1
P2711	JBB0031	Connector B8P-SHF-GB	1	1
P2712	JBB0033	Connector B16P-SHF-GB	1	1

PEF-686 CRT SOCKET

Symbol	Part Code	Description	Q'ty A	Q'ty B
R1491	RMV0009	R, Metal 1/2W 6.8MΩ ±5%	1	1
R1492	RCE0793	R, Carbon 1/4W 100kΩ ±5%	1	1
R1493	RCE0777	R, Carbon 1/4W 4.7kΩ ±5%	1	1
R1494	RCE0745	R, Carbon 1/4W 10Ω ±5%	1	1
R1495	RCE0769	R, Carbon 1/4W 1kΩ ±5%	1	1
R1496	RCE0745	R, Carbon 1/4W 10Ω ±5%	1	1
C1491	CCD0231	C, Ceramic 2000V 4700pF +80% -20%	1	1
C1492	CCD0231	C, Ceramic 2000V 4700pF +80% -20%	1	1
C1493	CCC1025	C, Ceramic 50V 100pF ±10%	1	1
C1494	CCC1030	C, Ceramic 50V 10000pF +80% -20%	1	1
C1495	CCC1030	C, Ceramic 50V 10000pF +80% -20%	1	1
J1490	JSP0001	Socket PS-085	1	1

Symbol	Part Code	Description	Q'ty A	Q'ty B

PEF-687 SCALE ILLUMINATION

Symbol	Part Code	Description	Q'ty A	Q'ty B
PL1457	8329332	Lamp Scale 14V 80mA	1	1
PL1458	8329332	Lamp Scale 14V 80mA	1	1
PL1459	8329332	Lamp Scale 14V 80mA	1	1

PEF-688 LED DRIVER

Symbol	Part Code	Description	Q'ty A	Q'ty B
IC2030	IDH0905	IC, Digital HD74LS259P	1	1
IC2031	IDH0905	IC, Digital HD74LS259P	1	1
IC2032	IDH0904	IC, Digital HD74LS145P	1	1
C2030	CCC1030	C, Ceramic 50V 10000pF +80 -20%	1	1
C2031	CCC1030	C, Ceramic 50V 10000pF +80 -20%	1	1
C2032	CCC1030	C, Ceramic 50V 10000pF +80 -20%	1	1

Symbol	Part Code	Description	Q'ty A	Q'ty B
P2600	JBC0C92	Card Fit Conn. CF-020	1	1
P2610	JBS0027	Connector SQ-8-AP-GB-C	1	1
P2612	JBS0027	Connector SQ-8-AP-GB-C	1	1
P2613	JBS0027	Connector SQ-8-AP-GB-C	1	1
P2611	JBS0027	Connector SQ-8-AP-GB-C	1	1

PEF-689 DVM and FREQUENCY COUNTER

Symbol	Part Code	Description	Q'ty A	Q'ty B
IC1604	IDH0812	IC, Digital HD14518BP (MC14518BCP)	1	
IC2035	IDT0043	IC, Digital TC40H244F	1	
IC2301	IDH0906	IC, Digital HD14529BP	1	
IC2302	IDH0005	IC, Digital HD10116	1	
IC2303	IDH0782	IC, Digital HD14001BP (MC14001BCP)	1	
IC2304	IDM0477	IC, Digital MSM5501RS	1	
IC2305	IDH0738	IC, Digital HD14013BP (MC14013BCP)	1	
IC2306	IDH0008	IC, Digital HD10131	1	
IC2307	IDH0822	IC, Digital HD74LS290P	1	
IC2602	ILN0046	IC, Analog NJM2904S	1	
IC2640	IDH0906	IC, Digital HD14529BP	1	
IC2650	IDM0479	IC, Digital MC14433P	1	
IC2651	IDT0043	IC, Digital TC40H244P	1	
IC2690	ILL0067	IC, Analog LM336Z	1	
TR2301	HTC0338	Transistor 2SC1906	1	
TR2302	HTC0338	Transistor 2SC1906	1	
TR2303	HTC0338	Transistor 2SC1906	1	
TR2304	HTC0338	Transistor 2SC1906	1	
TR2305	HTC0192	Transistor 2SC641K-C	1	
TR2306	HTA0224	Transistor 2SA1029D	1	
TR2603	HTC0168	Transistor 2SC535C	1	
TR2604	HTC0338	Transistor 2SC1906	1	
TR2690	HTA0224	Transistor 2SA1029D	1	
TR2691	HTA0224	Transistor 2SA1029D	1	
TR2700	HTC0338	Transistor 2SC1906	1	
D2301	HDM0139	Diode MTZ 3.3 JA	1	
D2304	HDM0139	Diode MTZ 3.3 JA	1	
D2607	HDS0459	Diode 1SS106	1	

PEF-689 DVM and FREQUENCY COUNTER

Symbol	Part Code	Description	Q'ty A	Q'ty B
D2609	HDS0459	Diode 1SS106	1	
D3004	HDM0140	Diode MTZ 4.7 JB	1	
R2300	RME1069	R, Metal 1/4W 562Ω ±1%	1	
R2301	RME1106	R, Metal 1/4W 75.0Ω ±1%	1	
R2302	RME1106	R, Metal 1/4W 75.0Ω ±1%	1	
R2303	RME1078	R, Metal 1/4W 3.32kΩ ±1%	1	
R2304	RME1078	R, Metal 1/4W 3.32kΩ ±1%	1	
R2305	RME1063	R, Metal 1/4W 182Ω ±1%	1	
R2307	RME1067	R, Metal 1/4W 392Ω ±1%	1	
R2308	RME1067	R, Metal 1/4W 392Ω ±1%	1	
R2309	RCE0759	R, Carbon 1/4W 150Ω ±5%	1	
R2310	RCE0766	R, Carbon 1/4W 560Ω ±5%	1	
R2311	RCE0753	R, Carbon 1/4W 47Ω ±5%	1	
R2312	RCE0753	R, Carbon 1/4W 47Ω ±5%	1	
R2313	RCE0759	R, Carbon 1/4W 150Ω ±5%	1	
R2315	RCE0766	R, Carbon 1/4W 560Ω ±5%	1	
R2316	RME1069	R, Metal 1/4W 562Ω ±1%	1	
R2320	RCE0777	R, Carbon 1/4W 4.7kΩ ±5%	1	
R2321	RCE0765	R, Carbon 1/4W 470Ω ±5%	1	
R2322	RCE0769	R, Carbon 1/4W 1kΩ ±5%	1	
R2323	RCE0779	R, Carbon 1/4W 6.8kΩ ±5%	1	
R2325	RCE0759	R, Carbon 1/4W 150Ω ±5%	1	
R2326	RCE0759	R, Carbon 1/4W 150Ω ±5%	1	
R2327	RCE0769	R, Carbon 1/4W 1kΩ ±5%	1	
R2328	RCE0774	R, Carbon 1/4W 2.7kΩ ±5%	1	
R2329	RCE0769	R, Carbon 1/4W 1kΩ ±5%	1	
R2330	RCE0757	R, Carbon 1/4W 100Ω ±5%	1	
R2332	RCE0769	R, Carbon 1/4W 1kΩ ±5%	1	
R2333	RCE0757	R, Carbon 1/4W 100Ω ±5%	1	
R2336	RCE0781	R, Carbon 1/4W 10kΩ ±5%	1	
R2338	RCE0769	R, Carbon 1/4W 1kΩ ±5%	1	
R2339	RCE0759	R, Carbon 1/4W 150Ω ±5%	1	
R2340	RCE0778	R, Carbon 1/4W 5.6kΩ ±5%	1	
R2341	RCE0766	R, Carbon 1/4W 560Ω ±5%	1	
R2342	RCE0765	R, Carbon 1/4W 470Ω ±5%	1	
R2344	RCE0766	R, Carbon 1/4W 560Ω ±5%	1	
R2348	RCE0769	R, Carbon 1/4W 1kΩ ±5%	1	
R2349	RCE0761	R, Carbon 1/4W 220Ω ±5%	1	
R2350	RCE0781	R, Carbon 1/4W 10kΩ ±5%	1	
R2351	RCE0757	R, Carbon 1/4W 100Ω ±5%	1	
R2353	RCE0745	R, Carbon 1/4W 10Ω ±5%	1	
R2354	RCE0769	R, Carbon 1/4W 1kΩ ±5%	1	
R2355	RCE0769	R, Carbon 1/4W 1kΩ ±5%	1	
R2361	RCE0789	R, Carbon 1/4W 47kΩ ±5%	1	
R2362	RCE0797	R, Carbon 1/4W 220kΩ ±5%	1	
R2363	RCE0782	R, Carbon 1/4W 12kΩ ±5%	1	
R2364	RCE0753	R, Carbon 1/4W 47Ω ±5%	1	
R2365	RCE0749	R, Carbon 1/4W 22Ω ±5%	1	
R2366	RCE0800	R, Carbon 1/4W 470kΩ ±5%	1	
R2367	RCE0800	R, Carbon 1/4W 470kΩ ±5%	1	
R2368	RCE0798	R, Carbon 1/4W 330kΩ ±5%	1	
R2369	RCE0784	R, Carbon 1/4W 18kΩ ±5%	1	
R2371	RME1072	R, Metal 1/4W 1.00kΩ ±1%	1	
R2372	RME1072	R, Metal 1/4W 1.00kΩ ±1%	1	
R2373	RME1174	R, Metal 1/4W 2.00kΩ ±1%	1	
R2374	RME1221	R, Metal 1/4W 1.37kΩ ±1%	1	
R2375	RCE0757	R, Carbon 1/4W 100Ω ±5%	1	
R2381	RCE0756	R, Carbon 1/4W 82Ω ±5%	1	

Symbol	Part Code	Description	Q'ty A	Q'ty B
R2383	RCE0769	R, Carbon 1/4W 1kΩ ±5%	1	
R2384	RCE0753	R, Carbon 1/4W 47Ω ±5%	1	
R2604	RCE0757	R, Carbon 1/4W 100Ω ±5%	1	
R2609	RCE0769	R, Carbon 1/4W 1kΩ ±5%	1	
R2618	RME1064	R, Metal 1/4W 221Ω ±1%	1	
R2624	RCE0765	R, Carbon 1/4W 470Ω ±5%	1	
R2627	RME1084	R, Metal 1/4W 10.0kΩ ±1%	1	
R2628	RME1084	R, Metal 1/4W 10.0kΩ ±1%	1	
R2630	RME1193	R, Metal 1/4W 11.0kΩ ±1%	1	
R2633	RCE0772	R, Carbon 1/4W 1.8kΩ ±5%	1	
R2634	RCE0788	R, Carbon 1/4W 39kΩ ±5%	1	
R2635	RCE0779	R, Carbon 1/4W 6.8kΩ ±5%	1	
R2655	RCE0773	R, Carbon 1/4W 2.2kΩ ±5%	1	
R2657	RME1085	R, Metal 1/4W 12.1kΩ ±1%	1	
R2658	RME1118	R, Metal 1/4W 909Ω ±1%	1	
R2690	RCE0789	R, Carbon 1/4W 47kΩ ±5%	1	
R2691	RCE0789	R, Carbon 1/4W 47kΩ ±5%	1	
R2700	RCE0771	R, Carbon 1/4W 1.5kΩ ±5%	1	
R2997	RME1193	R, Metal 1/4W 11.0kΩ ±1%	1	
R3000	RCE0789	R, Carbon 1/4W 47kΩ ±5%	1	
R3001	RCE0789	R, Carbon 1/4W 47kΩ ±5%	1	
R3002	RCE0777	R, Carbon 1/4W 4.7kΩ ±5%	1	
R3003	RCE0789	R, Carbon 1/4W 47kΩ ±5%	1	
R3004	RCE0789	R, Carbon 1/4W 47kΩ ±5%	1	
R3005	RCE0798	R, Carbon 1/4W 330kΩ ±5%	1	
R3006	RCE0786	R, Carbon 1/4W 27kΩ ±5%	1	
R3007	RCE0793	R, Carbon 1/4W 100kΩ ±5%	1	
RV2300	RNE0068	VR, Metal EVN 49C00YB14 (10K)	1	
RV2657	RNE0071	VR, Metal EVN 49C00YB52 (500)	1	
RV2658	RNE0073	VR, Metal EVN 49C00YB22 (200)	1	
C1604	CCC1030	C, Ceramic 50V 10000pF +80 −20%	1	
C2301	CCC1030	C, Ceramic 50V 10000pF +80 −20%	1	
C2302	CES0133	C, AL Elyc 16V 47μF ±20%	1	
C2307	CCC1030	C, Ceramic 50V 10000pF +80 −20%	1	
C2308	CCC1030	C, Ceramic 50V 10000pF +80 −20%	1	
C2312	CCC1365	C, Ceramic 50V 680pF ±10%	1	
C2313	CES0133	C, AL Elyc 16V 47μF ±20%	1	
C2315	CCC1365	C, Ceramic 50V 680pF ±10%	1	
C2322	CES0133	C, AL Elyc 16V 47μF ±20%	1	
C2325	CCC1007	C, Ceramic 50V 22pF ±5%	1	
C2330	CEX0189	C, AL Elyc 16V 10μF(BP) ±20%	1	
C2333	CCC1025	C, Ceramic 50V 100pF ±10%	1	
C2334	CES0133	C, AL Elyc 16V 47μF ±20%	1	
C2335	CCC1030	C, Ceramic 50V 10000pF +80 −20%	1	
C2336	CCC1034	C, Ceramic 50V 68pF ±5%	1	
C2340	CCC1030	C, Ceramic 50V 10000pF +80 −20%	1	
C2341	CCC0999	C, Ceramic 50V 5pF ±0.25pF	1	
C2342	CES0133	C, AL Elyc 16V 47μF ±20%	1	
C2343	CES0133	C, AL Elyc 16V 47μF ±20%	1	
C2344	CES0133	C, AL Elyc 16V 47μF ±20%	1	

PEF-689 DVM and FREQUENCY COUNTER

Symbol	Part Code	Description	Q'ty A	Q'ty B
C2349	CES0133	C, AL Elyc 16V 47μF ±20%	1	
C2350	CCC1030	C, Ceramic 50V 10000pF +80 −20%	1	
C2351	CCC1030	C, Ceramic 50V 10000pF +80 −20%	1	
C2601	CEX0189	C, AL Elyc 16V 10μF (BP) ±20%	1	
C2602	CEX0189	C, AL Elyc 16V 10μF (BP) ±20%	1	
C2604	CCC0997	C, Ceramic 50V 3pF ±0.25pF	1	
C2607	CES0133	C, AL Elyc 16V 47μF ±20%	1	
C2608	CES0133	C, AL Elyc 16V 47μF ±20%	1	
C2609	CCC1356	C, Ceramic 50V 470pF ±10%	1	
C2610	CCC1034	C, Ceramic 50V 68pF ±5%	1	
C2611	CCC1007	C, Ceramic 50V 22pF ±5%	1	
C2615	CES0133	C, AL Elyc 16V 47μF ±20%	1	
C2616	CCC1030	C, Ceramic 50V 10000pF +80 −20%	1	
C2617	CES0133	C, AL Elyc 16V 47μF ±20%	1	
C2618	CES0133	C, AL Elyc 16V 47μF ±20%	1	
C2619	CCC1002	C, Ceramic 50V 10pF ±0.5pF	1	
C2625	CES0133	C, AL Elyc 16V 47μF ±20%	1	
C2626	CES0133	C, AL Elyc 16V 47μF ±20%	1	
C2627	CES0133	C, AL Elyc 16V 47μF ±20%	1	
C2628	CES0133	C, AL Elyc 16V 47μF ±20%	1	
C2640	CQA0124	C, Plastic 50V 0.10μF ±10%	1	
C2642	CQA0124	C, Plastic 50V 0.10μF ±10%	1	
C2643	CQA0124	C, Plastic 50V 0.10μF ±10%	1	
C2651	CCC1030	C, Ceramic 50V 10000pF +80 −20%	1	
C2703	CCC1030	C, Ceramic 50V 10000pF +80 −20%	1	
L2301	TLE0058	Coil EL0606R-100K	1	
L2302	TLE0063	Coil EL0606R-330K	1	
L2303	TLF0052	Coil FL-3H R47M	1	
L2304	TLE0058	Coil EL0606R-100K	1	
L2305	TLE0058	Coil EL0606R-100K	1	
L2306	TLE0058	Coil EL0606R-100K	1	
L2352	TLE0058	Coil EL0606R-100K	1	
P2420	JBS0028	Connector SQ-14-AP-GB-C	1	
P2430	JBS0027	Connector SQ-8-AP-GB-C	1	
P2431	JBS0027	Connector SQ-8-AP-GB-C	1	
GND	8391000	Test point IPS-1136 DH Pin	1	
L2307	TLE0058	Coil EL0606R-100K	1	
L2304	CCC1030	C, Ceramic 50V 10000pF +80 −20%	1	

PEF-690 POWER TRANSISTOR and IC

Symbol	Part Code	Description	Q'ty A	Q'ty B
IC1351	ILM0327	IC, Analog μPC7912H	1	1
IC1541	ILH0108	IC, Analog HA17805P	1	1
IC1551	ILH0108	IC, Analog HA17805P	1	1
	HYS0C01	Washer SK-16B	3	3
	HYY0013	Washer YC10B	3	3
TR1513	HTD0126	Transistor 2SD1138-C	1	1
TR1521	HTD0155	Transistor 2SD313E	1	1
	HYS0001	Washer SK-16B	1	1
	HYY0013	Washer YC-10B	1	1
R1513	RCE0721	R, Carbon 1/2W 22kΩ ±5%	1	1
R1533	RCE0757	R, Carbon 1/4W 100Ω ±5%	1	1
R1590	RME1365	R, Metal 2W 100Ω ±5%	1	1
R1591	RME1364	R, Metal 2W 47Ω ±5%	1	1
R1592	RME1364	R, Metal 2W 47Ω ±5%	1	1
C1513	CCD0287	C, Ceramic 500V 4700pF +100 −0%	1	1
C1522	CCC1030	C, Ceramic 50V 10000pF +80 −20%	1	1
C1534	CES0227	C, AL Elyc 50V 10μF ±20%	1	1
C1535	CES0227	C, AL Elyc 50V 10μF ±20%	1	1
C1555	CCC1030	C, Ceramic 50V 10000pF +80 −20%	1	1

PFE-691 DELAY LINE (1)

Symbol	Part Code	Description	Q'ty A	Q'ty B
C468	CCC1001	C, Ceramic 50V 8pF ±0.5pF	1	1
C469	CCC1001	C, Ceramic 50V 8pF ±0.5pF	1	1
L468	TLF0003	Coil FL-3H R22M	1	1
L469	TLF0003	Coil FL-3H R22M	1	1
P470	JBS0026	Connector SSQ-4-AP-GB	1	1

Symbol	Part Code	Description	Q'ty A	Q'ty B

PEF-692 DELAY LINE (2)

Symbol	Part Code	Description	Q'ty A	Q'ty B
P471	JBS0026	Connector SSQ-4-AP-GB	1	1

PEF-696 GND CONTROL

Symbol	Part Code	Description	Q'ty A	Q'ty B
TR40	HTC0148	Transistor 2SC458C	1	
TR140	HTC0148	Transistor 2SC458C	1	
D40	HDS0437	Diode 1SS133	1	
D140	HDS0437	Diode 1SS133	1	
R4	RCE0769	R, Carbon 1/4W 1kΩ ±5%	1	

Symbol	Part Code	Description	Q'ty A	Q'ty B
R7	RCE0749	R, Carbon 1/4W 22Ω ±5%	1	
R40	RCE0757	R, Carbon 1/4W 100Ω ±5%	1	
R41	RCE0781	R, Carbon 1/4W 10kΩ ±5%	1	
R104	RCE0769	R, Carbon 1/4W 1kΩ ±5%	1	
R107	RCE0749	R, Carbon 1/4W 22Ω ±5%	1	
R140	RCE0757	R, Carbon 1/4W 100Ω ±5%	1	
R141	RCE0781	R, Carbon 1/4W 10kΩ ±5%	1	
C7	CCC1004	C, Ceramic 50V 15pF ±5%	1	
C40	CCC1030	C, Ceramic 50V 10000pF +80 −20%	1	
C45	CCC1030	C, Ceramic 50V 10000pF +80 −20%	1	
C107	CCC1004	C, Ceramic 50V 15pF ±5%	1	
C140	CCC1030	C, Ceramic 50V 10000pF +80 −20%	1	
C145	CCC1030	C, Ceramic 50V 10000pF +80 −20%	1	
K40	SRR0053	Relay NR-HD-12V (AE5343)	1	
K140	SRR0053	Relay NR-HD-12V (AE5343)	1	

PEF-697 TRANSISTOR for H. V. CKT

Symbol	Part Code	Description	Q'ty A	Q'ty B
TR1461	HTD0155	Transistor 2SD313E	1	1
C1464	CCC1182	C, Ceramic 50V 1000pF ±10%	1	1

PEF-699 V OUT AMP

Symbol	Part Code	Description				Q'ty A	Q'ty B
IC600	ILN0042	IC, Analog	NJM072S			1	1
IC615	ILU0009	IC, Analog	μPC398C			1	
IC616	ILN0044	IC, Analog	NJM2903S			1	
TR501	HTA0290	Transistor	2SA1206			1	1
TR502	HTA0290	Transistor	2SA1206			1	1
TR523	HTC0338	Transistor	2SC1906			1	1
TR524	HTC0338	Transistor	2SC1906			1	1
TR537	HTC0768	Transistor	2SC2408			1	1
TR538	HTC0768	Transistor	2SC2408			1	1
TR544	HTC0768	Transistor	2SC2408			1	1
TR545	HTC0768	Transistor	2SC2408			1	1
TR554	HTC0064	Transistor	2SC1252			1	1
TR555	HTC0064	Transistor	2SC1252			1	1
TR561	HTC0148	Transistor	2SC458C			1	1
TR573	HTC0064	Transistor	2SC1252			1	1
TR574	HTC0064	Transistor	2SC1252			1	1
TR580	HTC0338	Transistor	2SC1906			1	1
TR581	HTC0338	Transistor	2SC1906			1	1
TR593	HTC0148	Transistor	2SC458C			1	1
TR594	HTC0148	Transistor	2SC458C			1	1
TR595	HTC0148	Transistor	2SC458C			1	1
	HYT0006	Spacer	TO-5			8	8
D558	HDM0139	Diode	MTZ 3.3 JA			1	1
D559	HDM0139	Diode	MTZ 3.3 JA			1	1
D598	HDM0143	Diode	MTZ 15 JC			1	1
D599	HDM0143	Diode	MTZ 15 JC			1	1
D616	HDM0142	Diode	MTZ 12 JC			1	
R500	RCE0775	R, Carbon	1/4W	3.3kΩ	±5%	1	1
R501	RME1106	R, Metal	1/4W	75.0Ω	±1%	1	1
R502	RME1106	R, Metal	1/4W	75.0Ω	±1%	1	1
R507	RCE0745	R, Carbon	1/4W	10Ω	±5%	1	1
R508	RCE0745	R, Carbon	1/4W	10Ω	±5%	1	1
R510	RME1080	R, Metal	1/4W	4.75kΩ	±1%	1	1
R511	RCE0755	R, Carbon	1/4W	68Ω	±5%	1	1
R512	RCE0774	R, Carbon	1/4W	2.7kΩ	±5%	1	1
R513	RME1052	R, Metal	1/4W	22.1Ω	±1%	1	1
R515	RME1070	R, Metal	1/4W	681Ω	±1%	1	1
R516	RME1070	R, Metal	1/4W	681Ω	±1%	1	1
R517	RCE0764	R, Carbon	1/4W	390Ω	±5%	1	1
R518	RCE0764	R, Carbon	1/4W	390Ω	±5%	1	1
R519	RME1223	R, Metal	1/4W	432Ω	±1%	1	1
R520	RME1223	R, Metal	1/4W	432Ω	±1%	1	1
R521	RME1079	R, Metal	1/4W	3.92kΩ	±1%	1	1
R522	RME1073	R, Metal	1/4W	1.21kΩ	±1%	1	1
R523	RME1060	R, Metal	1/4W	100Ω	±1%	1	1
R524	RME1060	R, Metal	1/4W	100Ω	±1%	1	1
R525	RME1112	R, Metal	1/4W	301Ω	±1%	1	1
R531	RME1058	R, Metal	1/4W	68.1Ω	±1%	1	1
R532	RME1072	R, Metal	1/4W	1.00kΩ	±1%	1	1
R533	RME1064	R, Metal	1/4W	221Ω	±1%	1	1
R535	RME1070	R, Metal	1/4W	681Ω	±1%	1	1
R536	RME1070	R, Metal	1/4W	681Ω	±1%	1	1
R537	RCE0759	R, Carbon	1/4W	150Ω	±5%	1	1
R538	RCE0759	R, Carbon	1/4W	150Ω	±5%	1	1
R539	RCE0749	R, Carbon	1/4W	22Ω	±5%	1	1
R540	RCE0749	R, Carbon	1/4W	22Ω	±5%	1	1

Symbol	Part Code	Description				Q'ty A	Q'ty B
R541	RME1075	R, Metal	1/4W	1.82kΩ	±1%	1	1
R542	RME1073	R, Metal	1/4W	1.21kΩ	±1%	1	1
R543	RME1057	R, Metal	1/4W	56.2Ω	±1%	1	1
R544	RME1246	R, Metal	1/4W	110Ω	±1%	1	1
R545	RME1246	R, Metal	1/4W	110Ω	±1%	1	1
R546	RME1066	R, Metal	1/4W	332Ω	±1%	1	1
R547	RME1066	R, Metal	1/4W	332Ω	±1%	1	1
R549	RME1059	R, Metal	1/4W	82.5Ω	±1%	1	1
R550	RME1059	R, Metal	1/4W	82.5Ω	±1%	1	1
R551	RME1085	R, Metal	1/4W	12.1kΩ	±1%	1	1
R552	RME1112	R, Metal	1/4W	301Ω	±1%	1	1
R553	RME1066	R, Metal	1/4W	332Ω	±1%	1	1
R554	RME1066	R, Metal	1/4W	332Ω	±1%	1	1
R555	RME1112	R, Metal	1/4W	301Ω	±1%	1	1
R556	RCE0691	R, Carbon	1/2W	68Ω	±5%	1	1
R557	RCE0691	R, Carbon	1/2W	68Ω	±5%	1	1
R558	RCE0745	R, Carbon	1/4W	10Ω	±5%	1	1
R559	RCE0745	R, Carbon	1/4W	10Ω	±5%	1	1
R561	RCE0757	R, Carbon	1/4W	100Ω	±5%	1	1
R562	RCE0757	R, Carbon	1/4W	100Ω	±5%	1	1
R563	RCE0764	R, Carbon	1/4W	390Ω	±5%	1	1
R567	RME1087	R, Metal	1/4W	18.2kΩ	±1%	1	1
R571	RCE0757	R, Carbon	1/4W	100Ω	±5%	1	1
R573	RCE0758	R, Carbon	1/4W	120Ω	±5%	1	1
R574	RCE0758	R, Carbon	1/4W	120Ω	±5%	1	1
R575	RME1363	R, Metal	5W	390Ω	±2%	1	1
R576	RME1363	R, Metal	5W	390Ω	±2%	1	1
R577	RCE0743	R, Carbon	1/4W	4.7Ω	±5%	1	1
R578	RCE0814	R, Carbon	1/4W	270kΩ	±5%	1	1
R579	RCE0814	R, Carbon	1/4W	270kΩ	±5%	1	1
R582	RCE0753	R, Carbon	1/4W	47Ω	±5%	1	1
R583	RCE0756	R, Carbon	1/4W	82Ω	±5%	1	1
R584	RME1060	R, Metal	1/4W	100Ω	±1%	1	1
R585	RME1060	R, Metal	1/4W	100Ω	±1%	1	1
R586	RME1072	R, Metal	1/4W	1.00kΩ	±1%	1	1
R587	RCE0773	R, Carbon	1/4W	2.2kΩ	±5%	1	1
R588	RCE0789	R, Carbon	1/4W	47kΩ	±5%	1	1
R589	RCE0763	R, Carbon	1/4W	330Ω	±5%	1	1
R590	RCE0755	R, Carbon	1/4W	68Ω	±5%	1	1
R591	RCE0755	R, Carbon	1/4W	68Ω	±5%	1	1
R592	RME1073	R, Metal	1/4W	1.21kΩ	±1%	1	1
R593	RME1078	R, Metal	1/4W	3.32kΩ	±1%	1	1
R594	RME1068	R, Metal	1/4W	475Ω	±1%	1	1
R595	RCE0787	R, Carbon	1/4W	33kΩ	±5%	1	1
R596	RME1075	R, Metal	1/4W	1.82kΩ	±1%	1	1
R597	RME1078	R, Metal	1/4W	3.32kΩ	±1%	1	1
R598	RME1077	R, Metal	1/4W	2.67kΩ	±1%	1	1
R600	RME1214	R, Metal	1/4W	50.0kΩ	±0.5%	1	
R601	RME1214	R, Metal	1/4W	50.0kΩ	±0.5%	1	
R602	RCE0781	R, Carbon	1/4W	10kΩ	±5%	1	
R603	RME1212	R, Metal	1/4W	20.0kΩ	±0.5%	1	
R604	RCE0745	R, Carbon	1/4W	10Ω	±5%	1	1
R605	RME1212	R, Metal	1/4W	20.0kΩ	±0.5%	1	
R606	RCE0745	R, Carbon	1/4W	10Ω	±5%	1	1
R607	RCE0771	R, Carbon	1/4W	1.5kΩ	±5%	1	1
R608	RCE0773	R, Carbon	1/4W	2.2kΩ	±5%	1	
R609	RCE0761	R, Carbon	1/4W	220Ω	±5%	1	
R613	RCE0769	R, Carbon	1/4W	1kΩ	±5%	1	
R614	RCE0761	R, Carbon	1/4W	220Ω	±5%	1	
R615	RCE0757	R, Carbon	1/4W	100Ω	±5%	1	
R616	RCE0797	R, Carbon	1/4W	220kΩ	±5%	1	

PEF-699 V OUT AMP

Symbol	Part Code	Description				Q'ty A	Q'ty B
R617	RCE0757	R, Carbon	1/4W	100Ω	±5%	1	
R618	RCE0745	R, Carbon	1/4W	10Ω	±5%	1	
R619	RCE0793	R, Carbon	1/4W	100kΩ	±5%	1	
R620	RCE0761	R, Carbon	1/4W	220Ω	±5%	1	
R635	RCE0763	R, Carbon	1/4W	330Ω	±5%	1	1
RT501	RME0665	R, Metal	1/4W	1.21kΩ	±1%	1	1
RV512	RNE0070	VR, Metal	EVN 39C00YB53 (5K)			1	1
RV513	RNE0049	VR, Metal	EVN 39C00YB12 (100)			1	1
RV515	RNE0048	VR, Metal	EVN 39C00YB22 (200)			1	1
RV525	RNE0058	VR, Metal	EVN 39C00YB13 (1K)			1	1
RV583	RNE0048	VR, Metal	EVN 39C00YB22 (200)			1	1
RV588	RNE0053	VR, Metal	EVN 39C00YB24 (20K)			1	1
RV619	RNE0054	VR, Metal	EVN 39C00YB15 (100K)			1	
C501	CES0133	C, AL Elyc	16V	47μF	±20%	1	1
C510	CCC1014	C, Ceramic	50V	47 pF	±5%	1	1
C512	CCC1355	C, Ceramic	50V	270 pF	±10%	1	1
C513	CCC1011	C, Ceramic	50V	33 pF	±5%	1	1
C515	CCC1030	C, Ceramic	50V	10000 pF	+80 −20%	1	1
C517	CCC1365	C, Ceramic	50V	680 pF	±10%	1	1
C518	CCC1365	C, Ceramic	50V	680 pF	±10%	1	1
C519	CCC0999	C, Ceramic	50V	5 pF	±0.25pF	1	1
C521	CCC1030	C, Ceramic	50V	10000 pF	+80 −20%	1	1
C532	CCC1015	C, Ceramic	50V	56 pF	±5%	1	1
C533	CCC0997	C, Ceramic	50V	3 pF	±0.25pF	1	1
C536	CES0133	C, AL Elyc	16V	47μF	±20%	1	1
C537	CCC1182	C, Ceramic	50V	1000 pF	±10%	1	1
C538	CCC1182	C, Ceramic	50V	1000 pF	±10%	1	1
C543	CES0133	C, AL Elyc	16V	47μF	±20%	1	1
C551	CEX0189	C, AL Elyc	16V	10μF(BP)	±20%	1	1
C556	CCC1030	C, Ceramic	50V	10000 pF	+80 −20%	1	1
C557	CCC1030	C, Ceramic	50V	10000 pF	+80 −20%	1	1
C566	CCC1182	C, Ceramic	50V	1000 pF	±10%	1	1
C567	CCC1182	C, Ceramic	50V	1000 pF	±10%	1	1
C571	CCC1030	C, Ceramic	50V	10000 pF	+80 −20%	1	1
C577	CCC1030	C, Ceramic	50V	10000 pF	+80 −20%	1	1
C578	CET0033	C, AL Elyc	160V	1μF	±20%	1	1
C586	CCC1009	C, Ceramic	50V	27 pF	±5%	1	1
C588	CCC1359	C, Ceramic	50V	150 pF	±5%	1	1
C592	CCC1160	C, Ceramic	50V	330 pF	±10%	1	1
C595	CCC1030	C, Ceramic	50V	10000 pF	+80 −20%	1	1
C596	CCC1014	C, Ceramic	50V	47 pF	±5%	1	1
C598	CQA0122	C, Plastic	50V	0.047μF	±10%	1	1
C599	CQA0122	C, Plastic	50V	0.047μF	±10%	1	1
C602	CCC1182	C, Ceramic	50V	1000 pF	±10%	1	
C603	CCC1182	C, Ceramic	50V	1000 pF	±10%	1	
C604	CCC1030	C, Ceramic	50V	10000 pF	+80 −20%	1	1
C606	CCC1030	C, Ceramic	50V	10000 pF	+80 −20%	1	1
C615	CCC1030	C, Ceramic	50V	10000 pF	+80 −20%	1	
C617	CCC1030	C, Ceramic	50V	10000 pF	+80 −20%	1	
C618	CCC1030	C, Ceramic	50V	10000 pF	+80 −20	1	
C619	CQE0050	C, Plastic	100V	0.01μF	±5	1	

Symbol	Part Code	Description				Q'ty A	Q'ty B
C623	CQA0122	C, Plastic	50V	0.047μF	±10%	1	
C651	CCD0287	C, Ceramic	500V	4700 pF	+100 −0 %	1	1
C653	CES0133	C, AL Elyc	16V	47μF	±20%	1	1
C655	CES0133	C, AL Elyc	16V	47μF	±20%	1	1
CV513	CVE0047	C, Variable	ECR-HA020D11			1	1
CV531	CVE0046	C, Variable	ECR-HA010A11			1	1
CV533	CVE0047	C, Variable	ECR-HA020D11			1	1
L587	TLE0076	Coil	EL0606R-101K			1	1
L597	TLE0067	Coil	EL0606R-680K			1	1
L573	8354946B	Coil	T-Coil (3T, 7T)			1	1
L574	8354946B	Coil	T-Coil (3T, 7T)			1	1
J598	8193940	Pin	For Connector			1	1
J599	8193940	Pin	For Connector			1	1
P501	JBB0030	Connector	B4P-SHF-GB			1	1
P502	JBB0027	Connector	B2B-XH-A			1	1
P2200	JBC0096	Card Fit Conn.	CF-009			1	1
XTR573	EHM0013	Heat Sink	MC-213A840			1	1
XTR574	EHM0013	Heat Sink	MC-213A840			1	1
R353B	RCE0771	R, Carbon	1/4W	1.5kΩ	±5%	1	1
R616B	RCE0797	R, Carbon	1/4W	220kΩ	±5%	1	
C531B	CCC0999	C, Ceramic	50V	5 pF	±0.25pF	1	1

PEF-702 CURRENT SOURCE A

Symbol	Part Code	Description				Q'ty A	Q'ty B
IC706	8397023A	IC, Analog	LF411CN			1	1
TR712	HTC0769	Transistor	2SC2001L			1	1
TR713	HTC0769	Transistor	2SC2001L			1	1
TR720	HTA0224	Transistor	2SA1029D			1	1
TR724	HTA0224	Transistor	2SA1029D			1	1
TR735	HTA0224	Transistor	2SA1029D			1	1
D716	HDM0139	Diode	MTZ 3.3 JA			1	1
R701	RCE0797	R, Carbon	1/4W	220kΩ	±5%	1	1
R702	RME1082	R, Metal	1/4W	6.81kΩ	±1%	1	1
R703	RCE0785	R, Carbon	1/4W	22kΩ	±5%	1	1

PEF-702 CURRENT SOURCE A

Symbol	Part Code	Description				Q'ty A	Q'ty B
R704	RME1071	R, Metal	1/4W	825Ω	±1%	1	1
R706	RCE0785	R, Carbon	1/4W	22kΩ	±5%	1	1
R707	RCE0775	R, Carbon	1/4W	3.3kΩ	±5%	1	1
R711	RCE0751	R, Carbon	1/4W	33Ω	±5%	1	1
R712	RME1155	R, Metal	1/4W	4.00kΩ	±0.5%	1	1
R713	RME1372	R, Metal	1/4W	40.0kΩ	±0.5%	1	1
R716	RME1373	R, Metal	1/4W	400kΩ	±0.5%	1	1
R720	RCE0781	R, Carbon	1/4W	10kΩ	±5%	1	1
R721	RCE0793	R, Carbon	1/4W	100kΩ	±5%	1	1
R722	RCE0781	R, Carbon	1/4W	10kΩ	±5%	1	1
R723	RCE0785	R, Carbon	1/4W	22kΩ	±5%	1	1
R724	RCE0781	R, Carbon	1/4W	10kΩ	±5%	1	1
R726	RCE0793	R, Carbon	1/4W	100kΩ	±5%	1	1
R727	RCE0785	R, Carbon	1/4W	22kΩ	±5%	1	1
R728	RCE0785	R, Carbon	1/4W	22kΩ	±5%	1	1
R730	RME1084	R, Metal	1/4W	10.0kΩ	±1%	1	1
R731	RCE0773	R, Carbon	1/4W	2.2kΩ	±5%	1	1
R732	RCE0787	R, Carbon	1/4W	33kΩ	±5%	1	1
R733	RCE0777	R, Carbon	1/4W	4.7kΩ	±5%	1	1
R734	RCE0785	R, Carbon	1/4W	22kΩ	±5%	1	1
R740	RCE0771	R, Carbon	1/4W	1.5kΩ	±5%	1	1
R741	RCE0753	R, Carbon	1/4W	47Ω	±5%	1	1
C702	CCC1030	C, Ceramic	50V	10000pF	+80 −20%	1	1
C706	CQA0122	C, Plastic	50V	0.047μF	±10%	1	1
C714	CQA0133	C, Plastic	50V	0.47μF	±10%	1	1
C716	CES0133	C, AL Elyc	16V	47μF	±20%	1	1
C732	CES0133	C, AL Elyc	16V	47μF	±20%	1	1
C740	CCC1030	C, Ceramic	50V	10000pF	+80 −20%	1	1
C741	CES0133	C, AL Elyc	16V	47μF	±20%	1	1
P711	JBS0031	Connector	SSQ-14-AP-GB			1	1

PEF-703 CURRENT SOURCE B

Symbol	Part Code	Description				Q'ty A	Q'ty B
IC756	8397023A	IC, Analog	LF411CN			1	1
TR762	HTC0769	Transistor	2SC2001L			1	1
TR763	HTC0769	Transistor	2SC2001L			1	1
TR770	HTA0224	Transistor	2SA1029D			1	1
TR774	HTA0224	Transistor	2SA1029D			1	1
TR785	HTA0224	Transistor	2SA1029D			1	1
D766	HDM0139	Diode	MTZ 3.3 JA			1	1
R752	RME1082	R, Metal	1/4W	6.81kΩ	±1%	1	1
R756	RCE0785	R, Carbon	1/4W	22kΩ	±5%	1	1
R757	RCE0775	R, Carbon	1/4W	3.3kΩ	±5%	1	1
R761	RCE0751	R, Carbon	1/4W	33Ω	±5%	1	1
R762	RME1155	R, Metal	1/4W	4.00kΩ	±0.5%	1	1
R763	RME1372	R, Metal	1/4W	40.0kΩ	±0.5%	1	1
R764	RME1373	R, Metal	1/4W	400kΩ	±0.5%	1	1
R770	RCE0781	R, Carbon	1/4W	10kΩ	±5%	1	1
R771	RCE0793	R, Carbon	1/4W	100kΩ	±5%	1	1
R772	RCE0781	R, Carbon	1/4W	10kΩ	±5%	1	1
R773	RCE0785	R, Carbon	1/4W	22kΩ	±5%	1	1
R774	RCE0781	R, Carbon	1/4W	10kΩ	±5%	1	1
R776	RCE0793	R, Carbon	1/4W	100kΩ	±5%	1	1
R777	RCE0785	R, Carbon	1/4W	22kΩ	±5%	1	1
R778	RCE0785	R, Carbon	1/4W	22kΩ	±5%	1	1
R780	RME1084	R, Metal	1/4W	10.0kΩ	±1%	1	1
R781	RCE0773	R, Carbon	1/4W	2.2kΩ	±5%	1	1
R782	RCE0787	R, Carbon	1/4W	33kΩ	±5%	1	1
R783	RCE0777	R, Carbon	1/4W	4.7kΩ	±5%	1	1
R784	RCE0785	R, Carbon	1/4W	22kΩ	±5%	1	1
R790	RCE0771	R, Carbon	1/4W	1.5kΩ	±5%	1	1
R791	RCE0753	R, Carbon	1/4W	47Ω	±5%	1	1
C752	CCC1030	C, Ceramic	50V	10000pF	+80 −20%	1	1
C754	CCC1030	C, Ceramic	50V	10000pF	+80 −20%	1	1
C756	CQA0122	C, Plastic	50V	0.047μF	±10%	1	1
C766	CES0133	C, AL Elyc	16V	47μF	±20%	1	1
C782	CES0133	C, AL Elyc	16V	47μF	±20%	1	1
C790	CCC1030	C, Ceramic	50V	10000pF	+80 −20%	1	1
C791	CES0133	C, AL Elyc	16V	47μF	±20%	1	1
P761	JBS0031	Connector	SSQ-14-AP-GB			1	1

PEF-704 TRANSISTOR for SCALE ILLUM

Symbol	Part Code	Description	Q'ty A	Q'ty B
TR1457	HTD0155	Transistor 2SD313E	1	1
P1457	JBS0022	Connector S3B-XH-A	1	1

PEF-706 CH2 INPUT CKT

Symbol	Part Code	Description	Q'ty A	Q'ty B
R103	RCE0755	R, Carbon 1/4W 68Ω ±5%	1	1
C101	CCC1030	C, Ceramic 50V 10000pF +80 -20%	1	1
C102	CQX0068	C, Plastic 400V 0.047μF ±20%	1	1
C103	CCC1003	C, Ceramic 50V 12pF ±5%	1	1
C104	CCC1030	C, Ceramic 50V 10000pF +80 -20%	1	1
C105	CCC1030	C, Ceramic 50V 10000pF +80 -20%	1	1
S101	8393985	SW, Lever SLE623	1	1

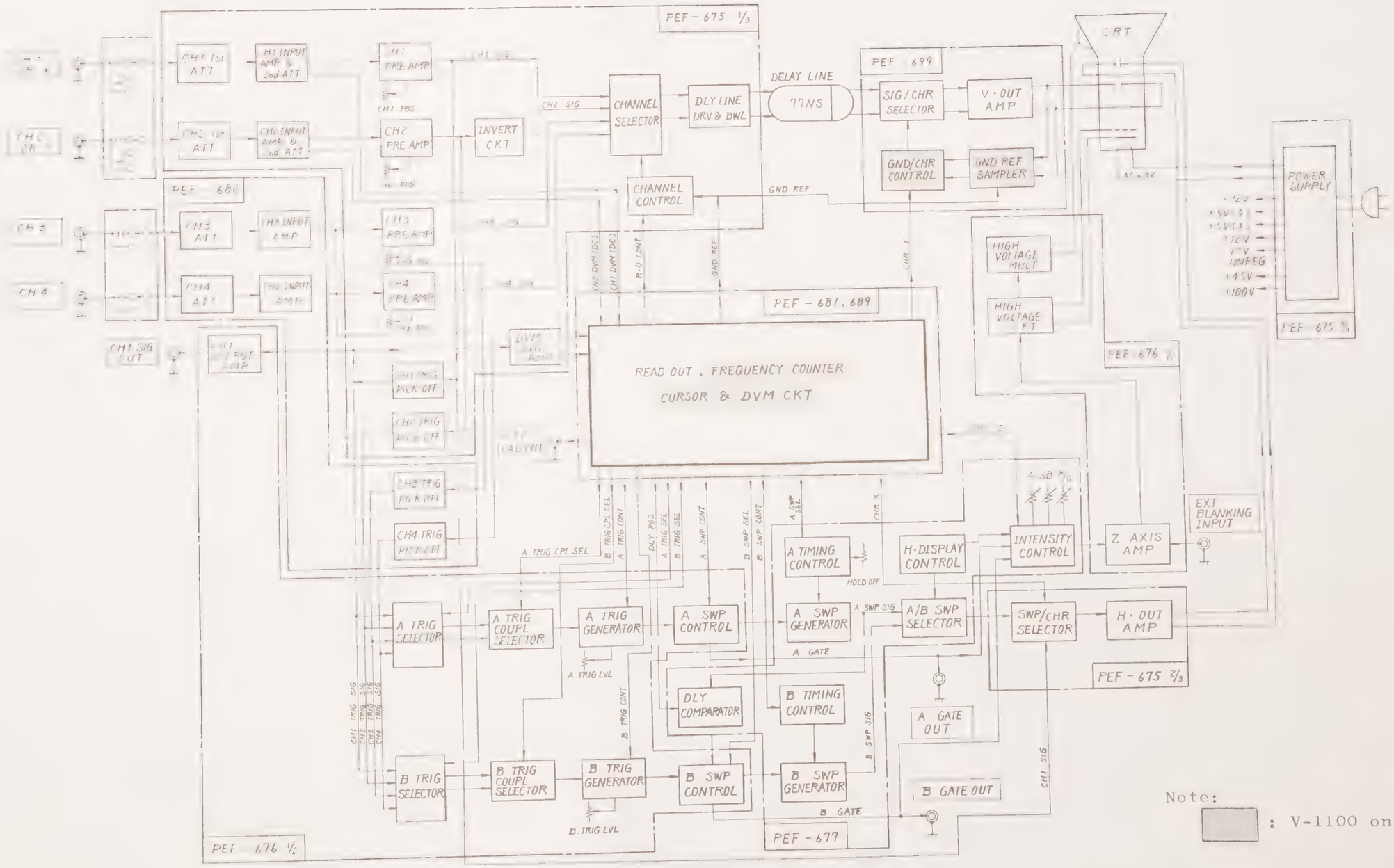
PEF-707 DIODE for LOW VOLTAGE

Symbol	Part Code	Description	Q'ty A	Q'ty B
D1560	HDM0048	Diode M4C-6	1	1
D1571	HDE0053	Diode EK04	1	1
D1572	HDE0053	Diode EK04	1	1
D1573	HDE0053	Diode EK04	1	1
D1574	HDE0053	Diode EK04	1	1
D1581	HDE0053	Diode EK04	1	1
D1582	HDE0053	Diode EK04	1	1
D1583	HDE0053	Diode EK04	1	1
D1584	HDE0053	Diode EK04	1	1

CHASSIS

Symbol	Part Code	Description	Q'ty A	Q'ty B
V1490	8410384	CRT H6111-P31	1	1
R1	RCE0745	R, Carbon 1/4W 10Ω ±5%	1	1
R101	RCE0745	R, Carbon 1/4W 10Ω ±5%	1	1
RV1487	RNE0069	VR, Metal EVM-NFGK20B26	1	1
T1501	3184282	XFMR XFMR For V-1100	1	1
	3189657	Coil Trace Rotation	1	1
S1562	8400067	SW, PB SDV 3P (UL, CSA)	1	1
J1	JHB0088	Coax. Con BNC071	1	1
J101	JHB0088	Coax. Con BNC071	1	1
J246	JHB0088	Coax. Con BNC071	1	1
J300	JHB0088	Coax. Con BNC071	1	1
J350	JHB0088	Coax. Con BNC071	1	1
J1421	JHB0088	Coax. Con BNC071	1	1
J1562	JJC0026	Connector CM3 (C-170)	1	1
J1563	3142147I	Terminal S-17221 (100/120/220/240V)	1	1
J1606	8397022	Test Point Z069	1	1
J1702	JHB0088	Coax. Con BNC071	1	1
J1703	JHB0088	Coax. Con BNC071	1	1
	8338351	Terminal Z-048 (Earth)	1	1
DL470	8410383	Delay Line 77ns 140Ω 15M	1	1

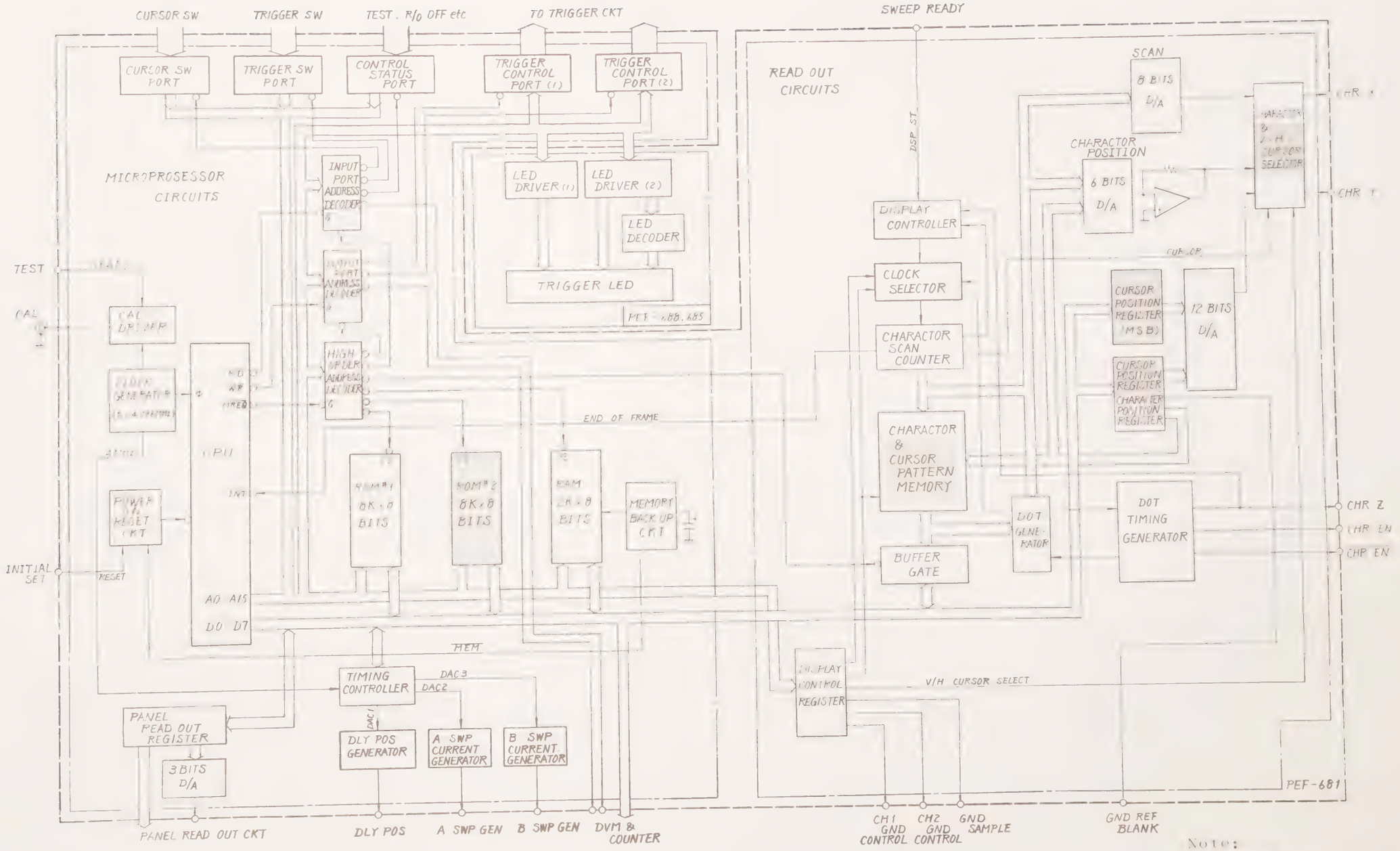
9. BLOCK DIAGRAMS



Note:

: V-1100 only.

BLOCK DIAGRAM (OSCILLOSCOPE)



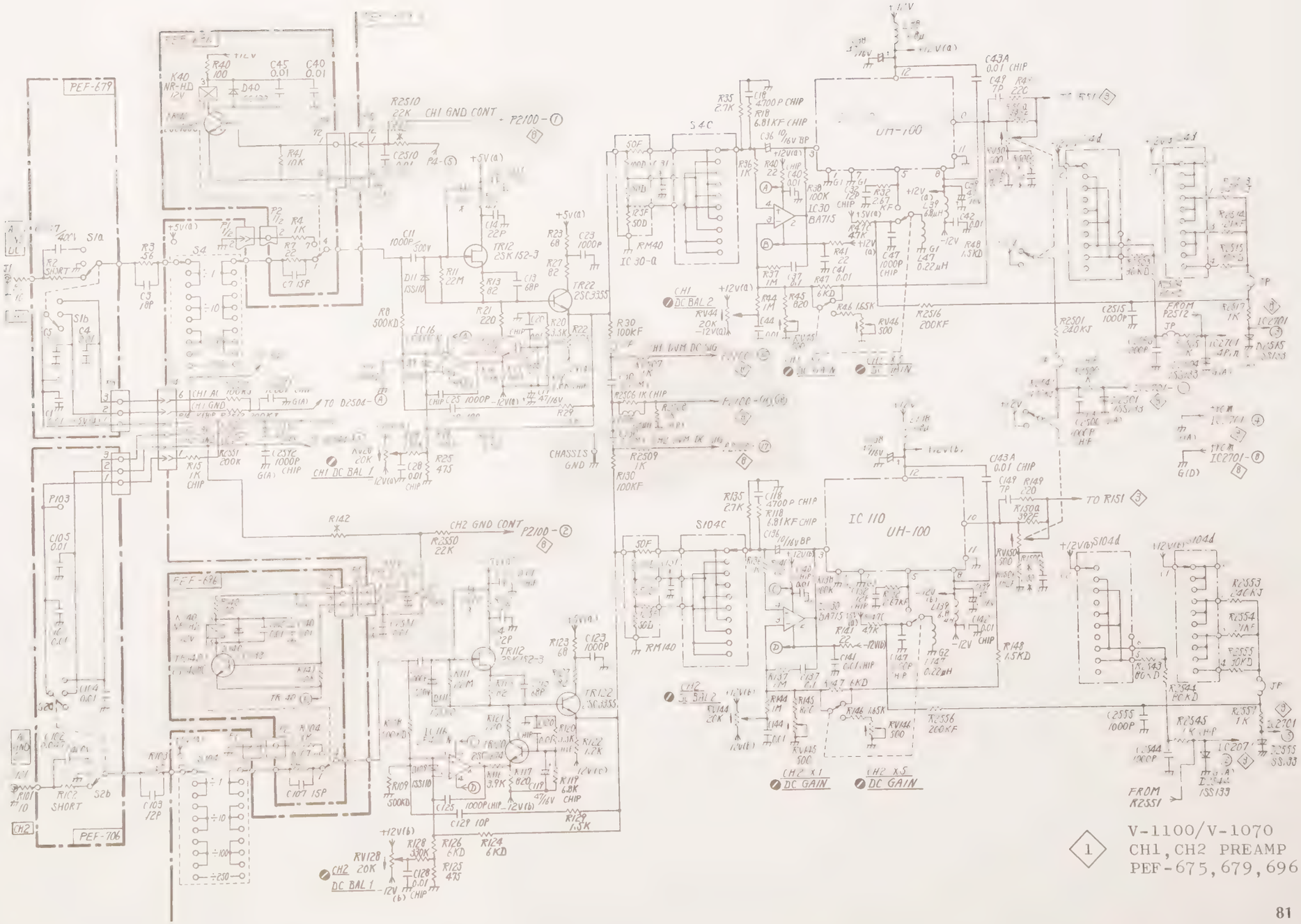
Note:

: V-1100 only.

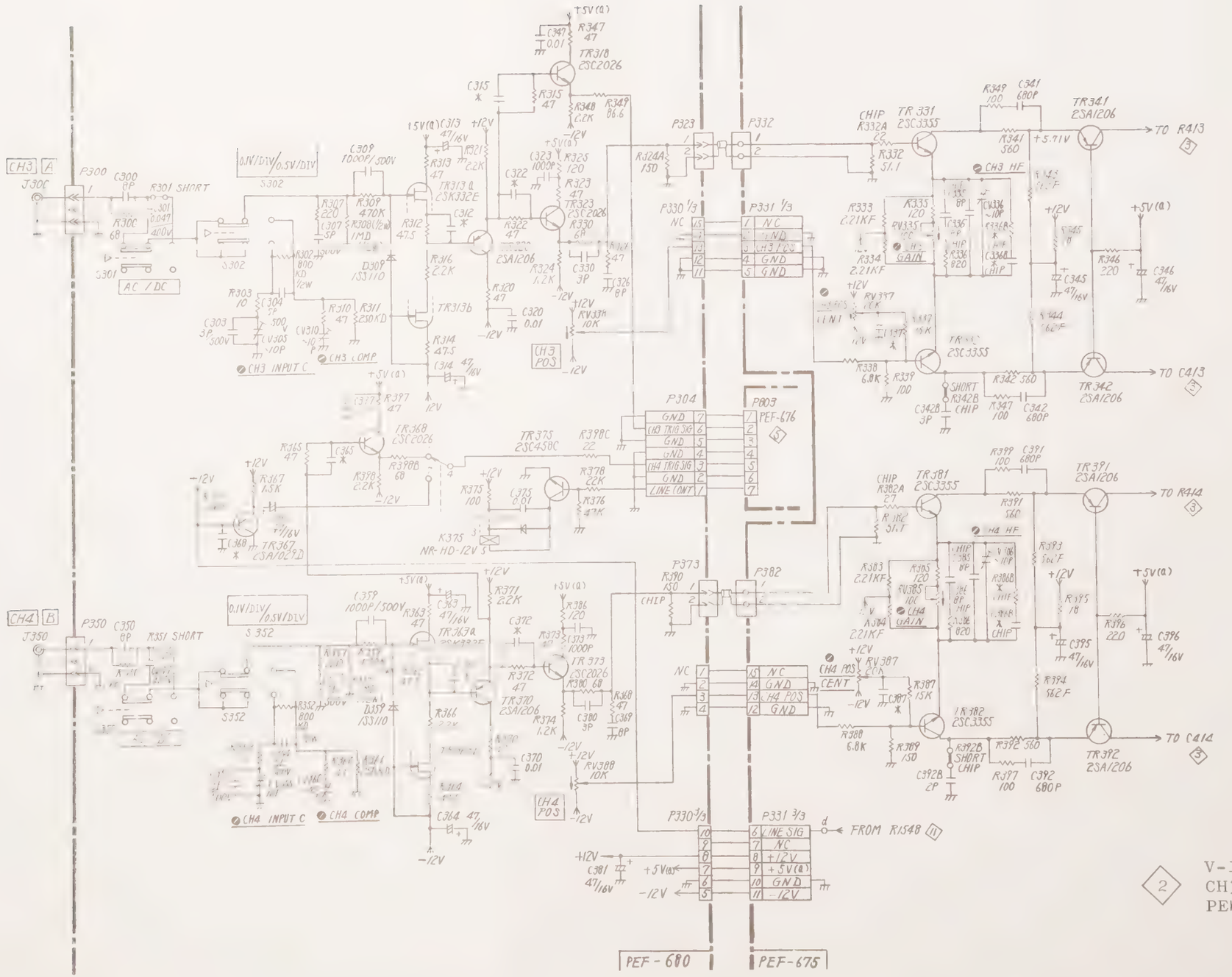
BLOCK DIAGRAM (DIGITAL CONTROL)

Notes:

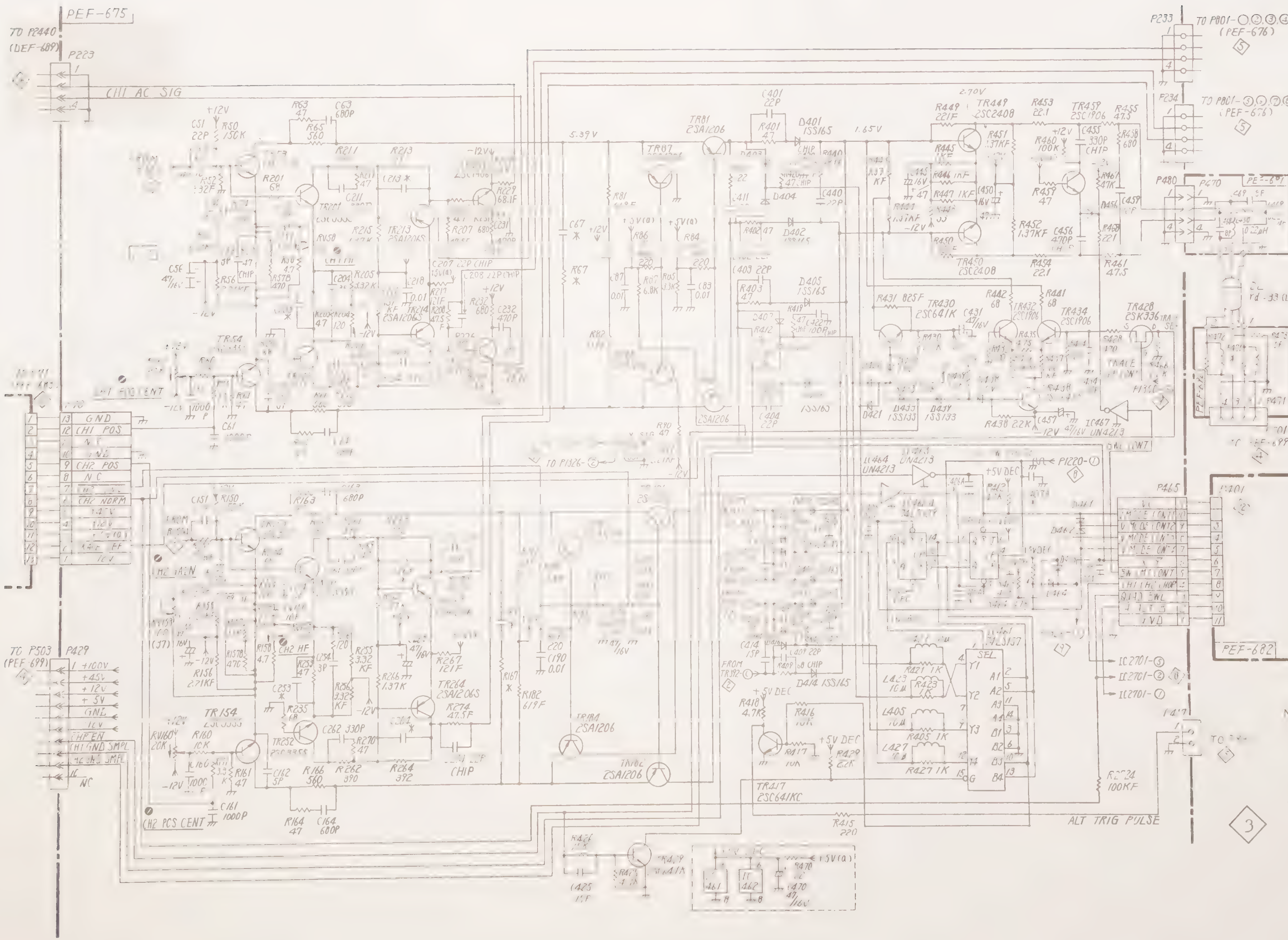
1. All of the basic circuit diagrams are subject to change without notice.
2. All resister values in ohm: 1/4w and all capacitor values in micro-farad unless indicated.
3. * : Factory selected values.
4. Diode: 1SS133 unless otherwise noticed.
5. ▭ : V-1100 only.



◇1 V-1100/V-1070
CH1, CH2 PREAMP
PEF-675, 679, 696, 706



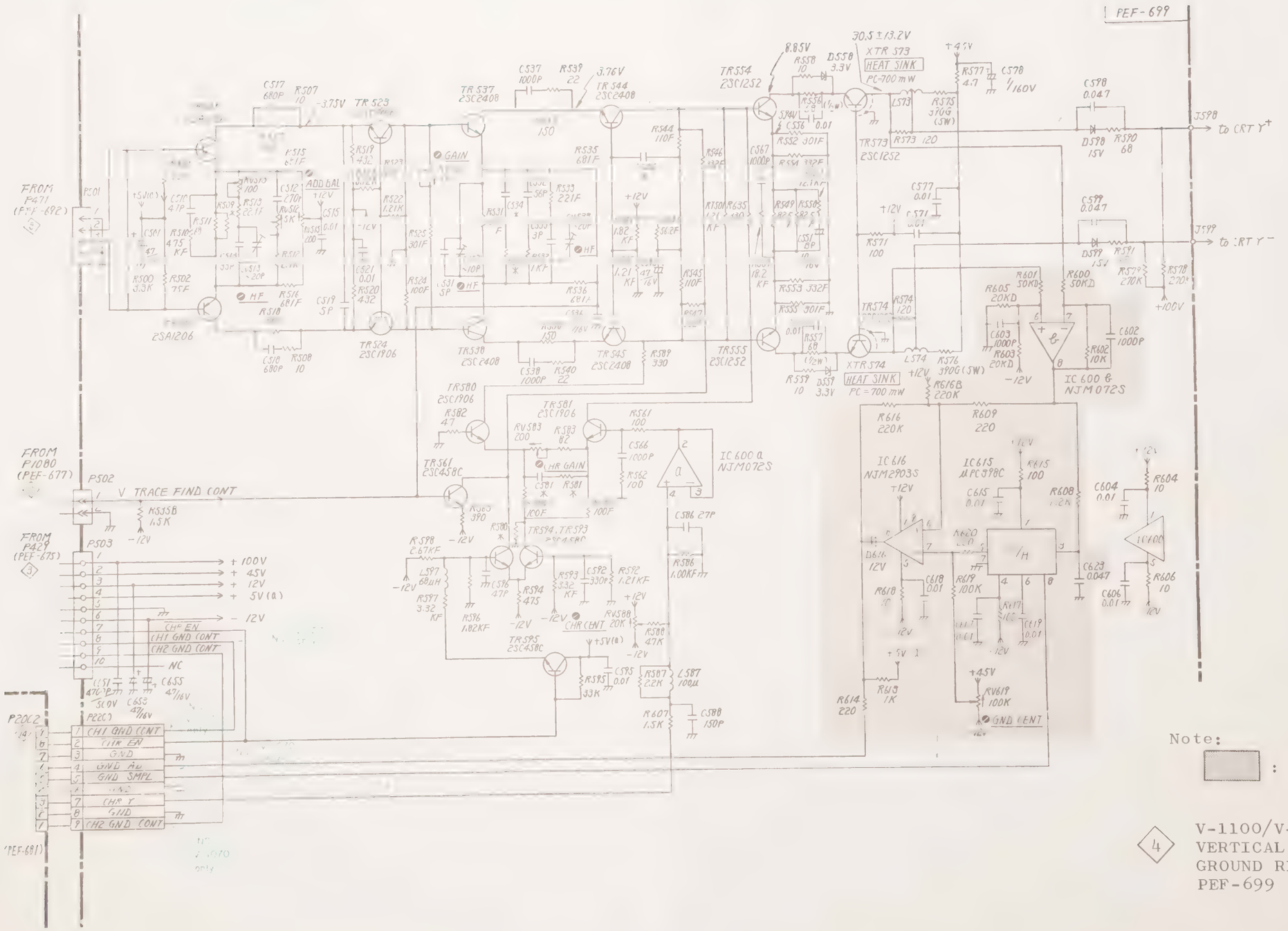
◇2 V-1100/V-1070
CH3, CH4 PREAMP
PEF-675, 680


PEF-675
TO P2440
(DEF-689)
P223
CH1 AC SIG
P233
TO P801-①,②,③,④
(PEF-676)
5
P234
TO P801-⑤,⑥,⑦,⑧
(PEF-676)
5
P480
P470
P471
TO P503
(PEF-699)
P429
+100V
+45V
+12V
+5V
GND
CHP EN
CH1 GND SMPL
NC
GND
CH1 POS
CH2 POS
NC
CH2 NORM
CH2 PCS CENT
CH2 HF
TR81
2SA1206
TR449
2SC2408
TR450
2SC2408
TR459
2SC1906
TR430
2SC641K
TR432
2SC1906
TR434
2SC1906
TR428
2SK336
TR213
2SA1206S
TR214
2SA1206S
TR154
TR252
TR264
2SA1206S
TR184
2SA1206
TR162
2SA1206
TR417
2SC641KC
IC467
UN4213
IC464
UN4213
D401
1SS165
D402
D405
1SS165
D414 1SS165
D433
1SS133
D434
1SS133
D421
5.39V
1.65V
2.70V
SEL
Y1
Y2
Y3
A1
A2
A3
B1
B2
B3
B4
G
P465
P2201
PEF-682
IC2701-⑤
IC2701-②
IC2701-①
ALT TRIG PULSE
R2724
100KF
R415
220
TO P1326-②
P1220-①
+5V DEC
+5V(a)
FROM TR392-①
R438 2.2K
R421 1K
R423 1K
R405 1K
R427 1K
L423
L405
L427

Note:

: V-1100 only.

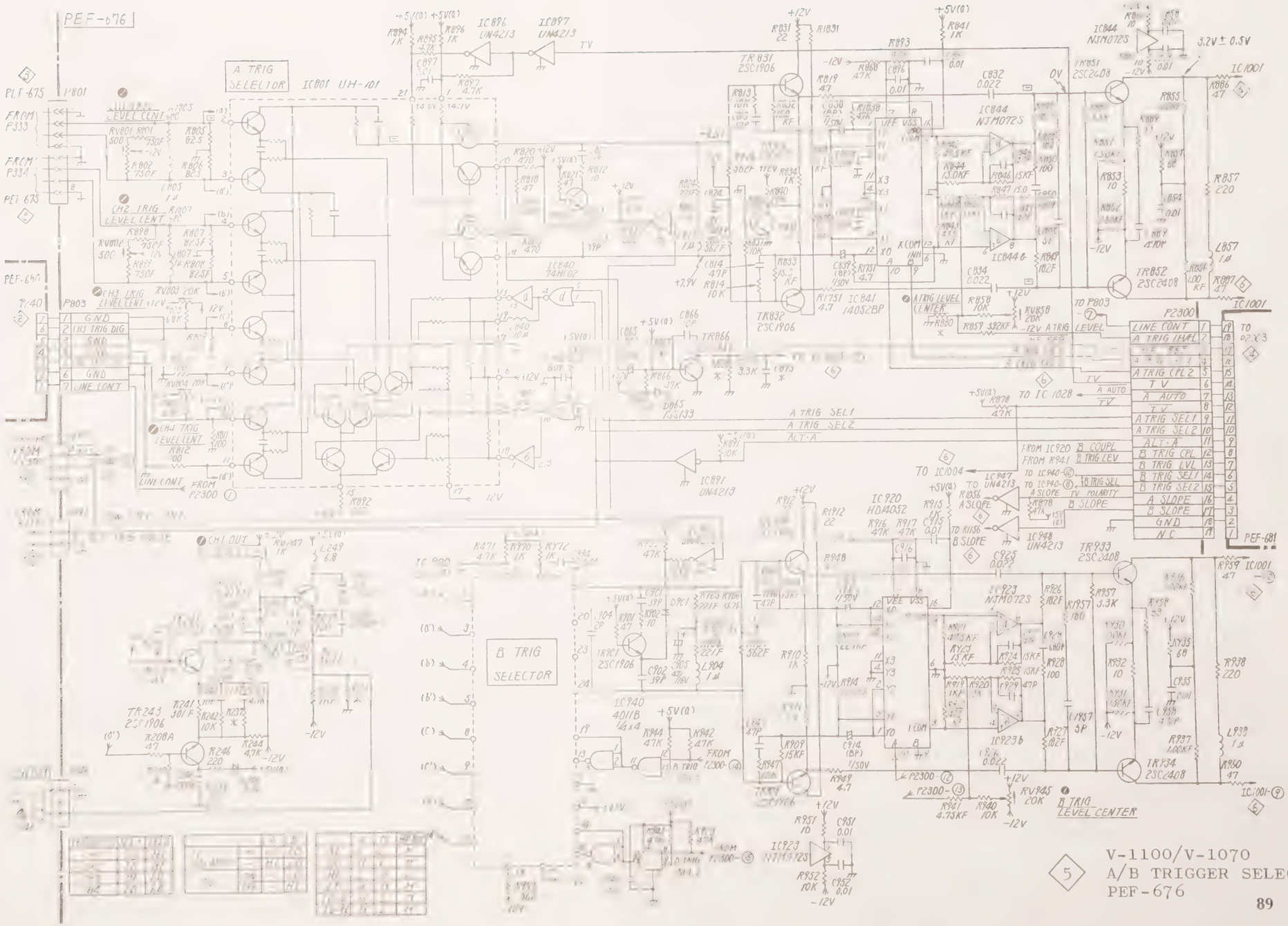
3 V-1100/V-1070
VERTICAL SWITCHING CKT
PEF-675,691,692



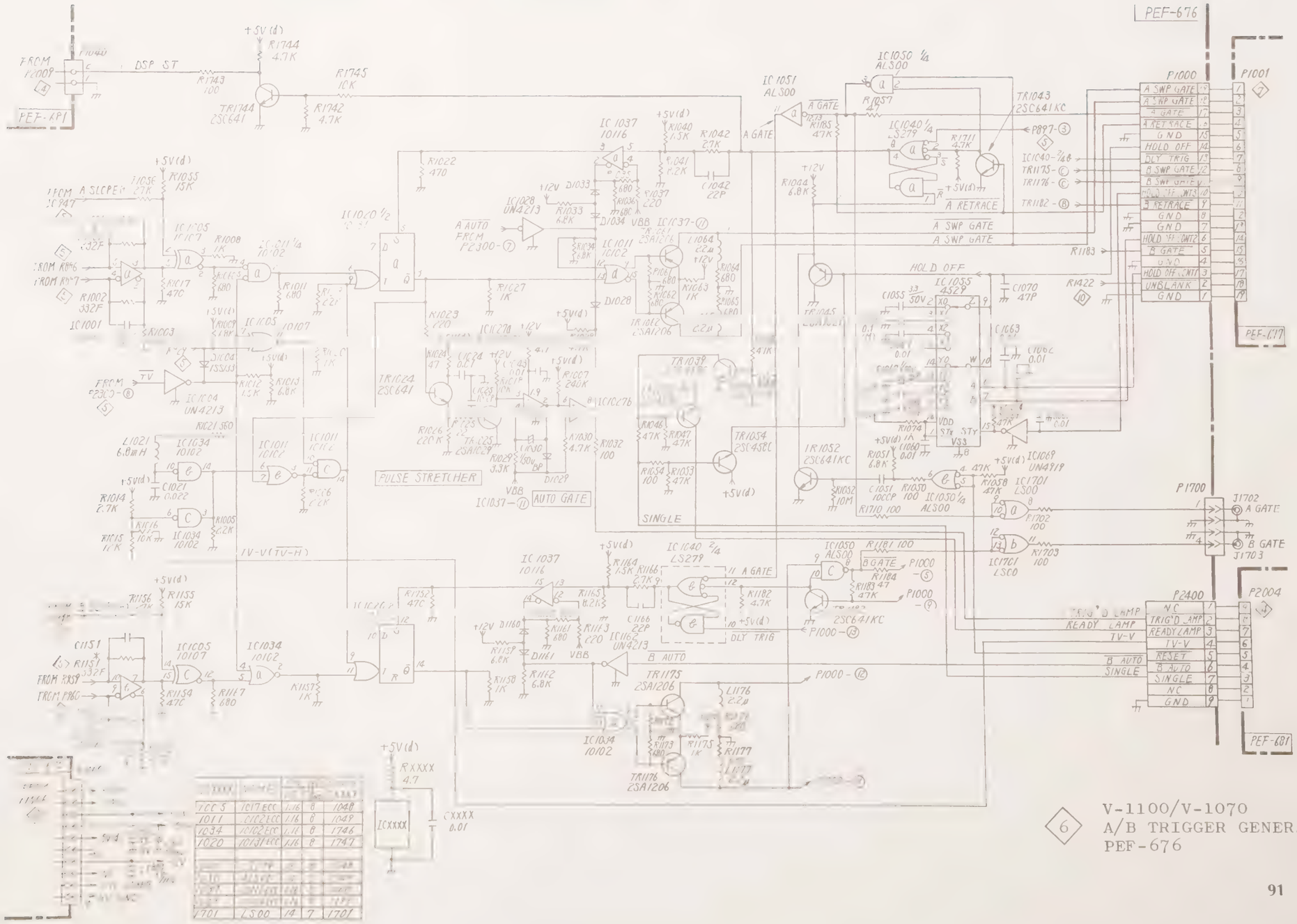
Note:

▭ : V-1100 only.

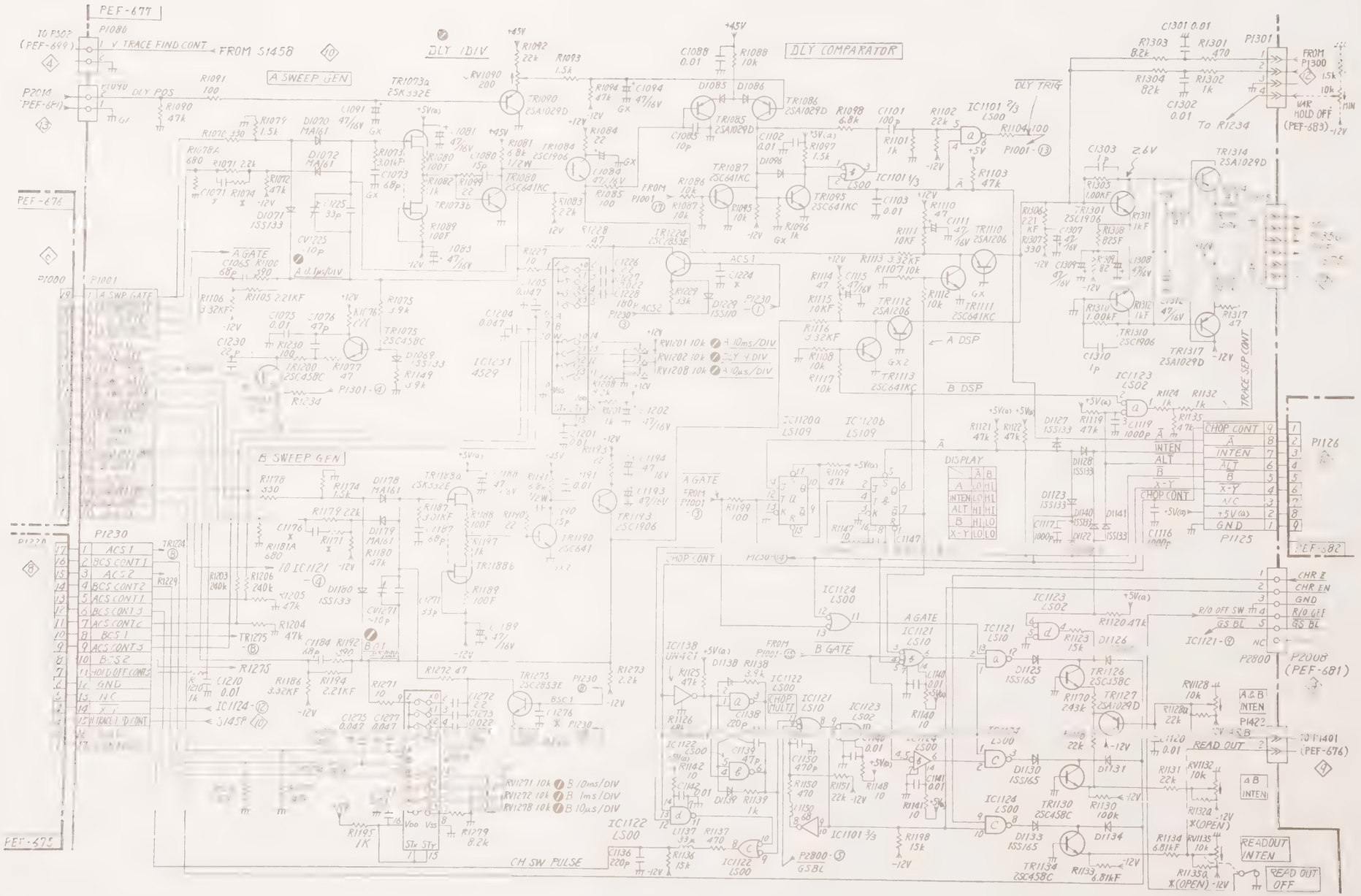
◇4 V-1100/V-1070
VERTICAL OUTPUT AMP
GROUND REFERENCE CKT
PEF-699

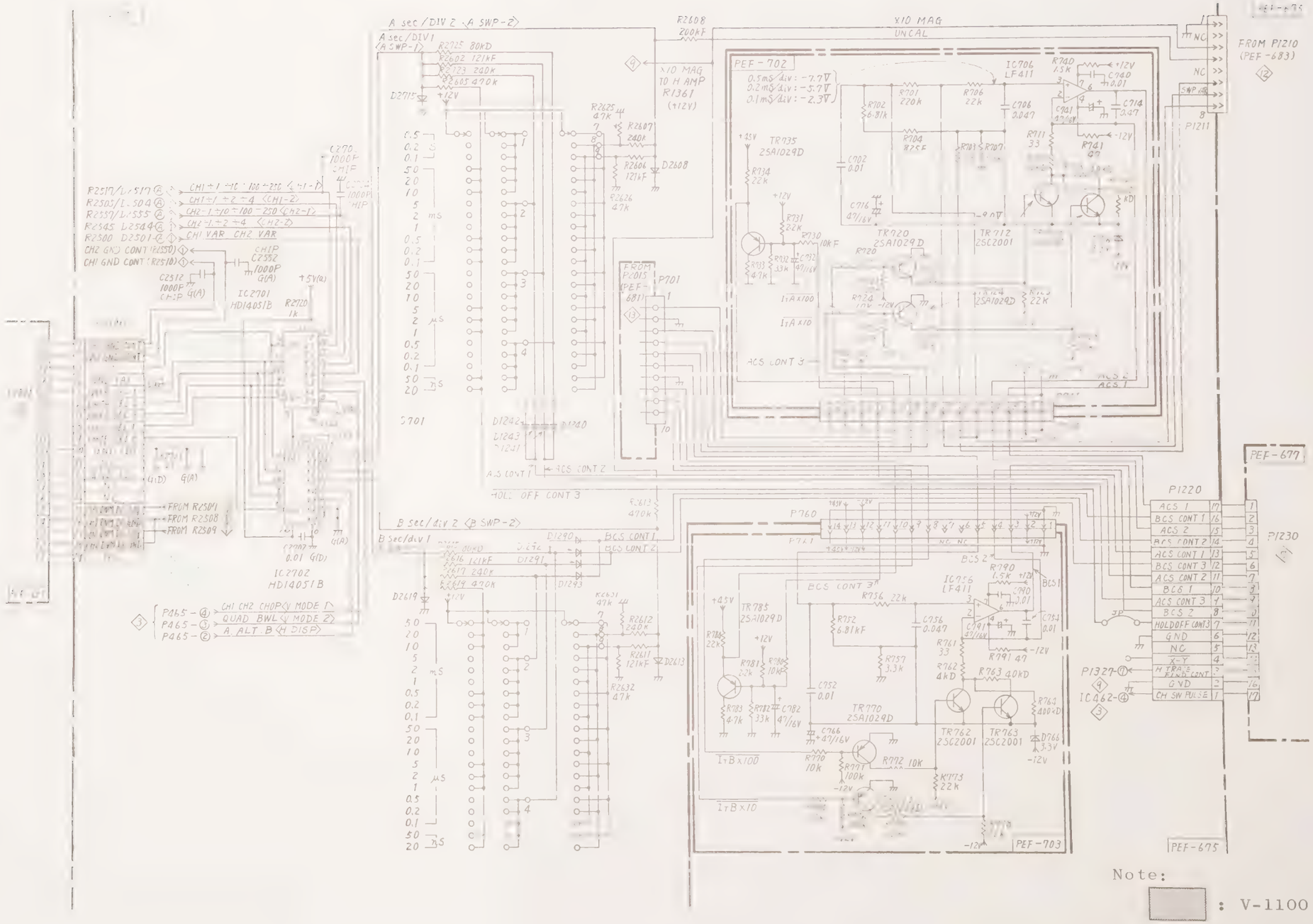


5 V-1100/V-1070
A/B TRIGGER SELECTOR
PEF-676



6 V-1100/V-1070
A/B TRIGGER GENERATOR
PEF-676

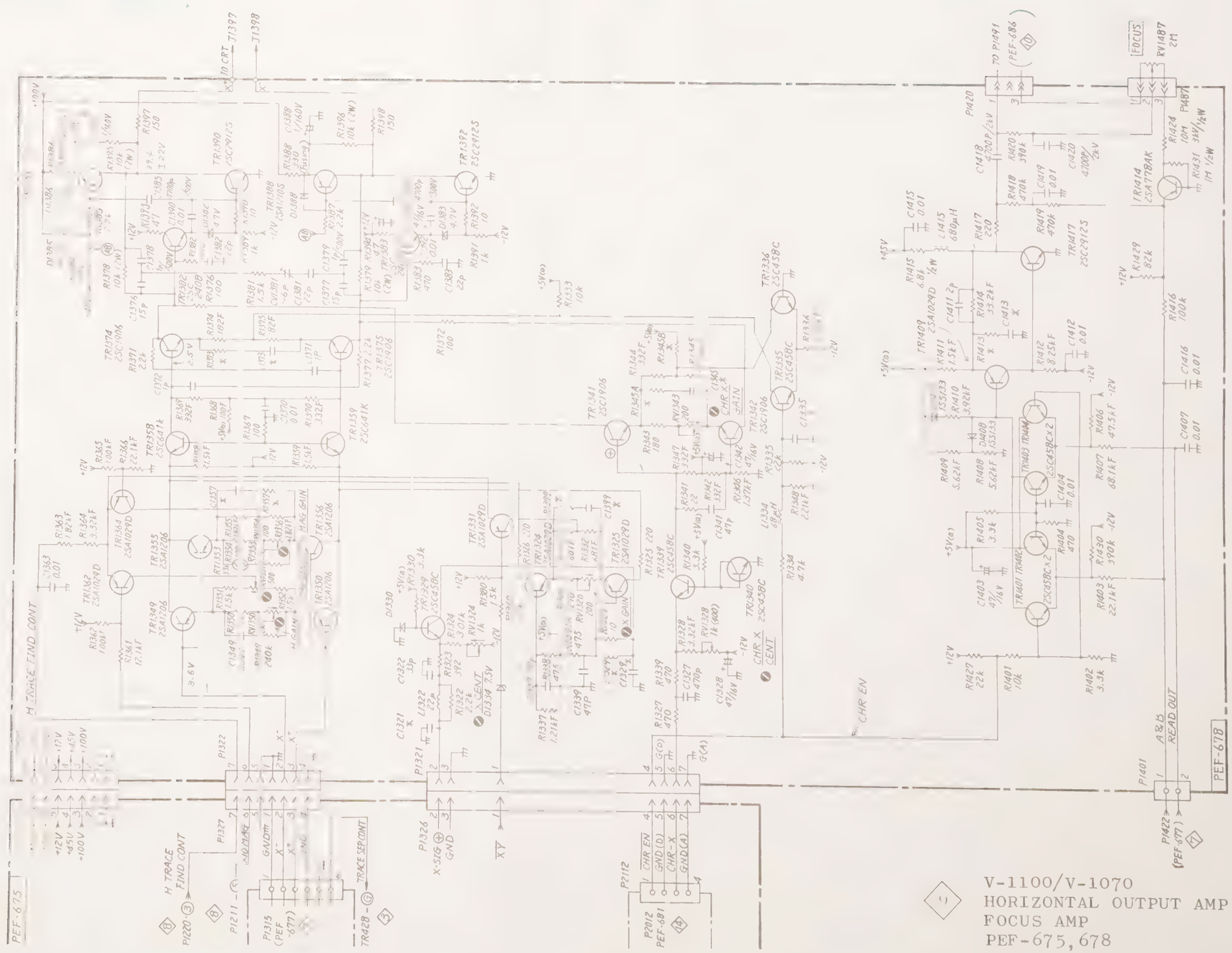

PEF-677
P1086
TO P502 (PEF-699)
V TRACE FIND CONT
FROM S1458
A SWEEP GEN
DLY POS
DLY 1DIV
DLY COMPARATOR
DLY TRIG
TO R1234
P1301
P1300
VAR HOLD OFF (PEF-683)
P2014 (PEF-681)
PEF-676
P1000
P1001
A SWP GATE
A GATE
A d.tys/DIV
ACS1
ACS2
A DSP
B DSP
TRACE SEP CONT
P1230
P1126
CHOP CONT
INTEN
ALT
X-Y
GND
DISPLAY
B SWEEP GEN
B GATE
CH SW PULSE
P2800 (PEF-681)
P1401 (PEF-676)
READ OUT
READOUT INTEN
READ OUT OFF
PEF-675
PEF-682
V-1100/V-1070
A/B SWEEP GENERATOR
PEF-677
93



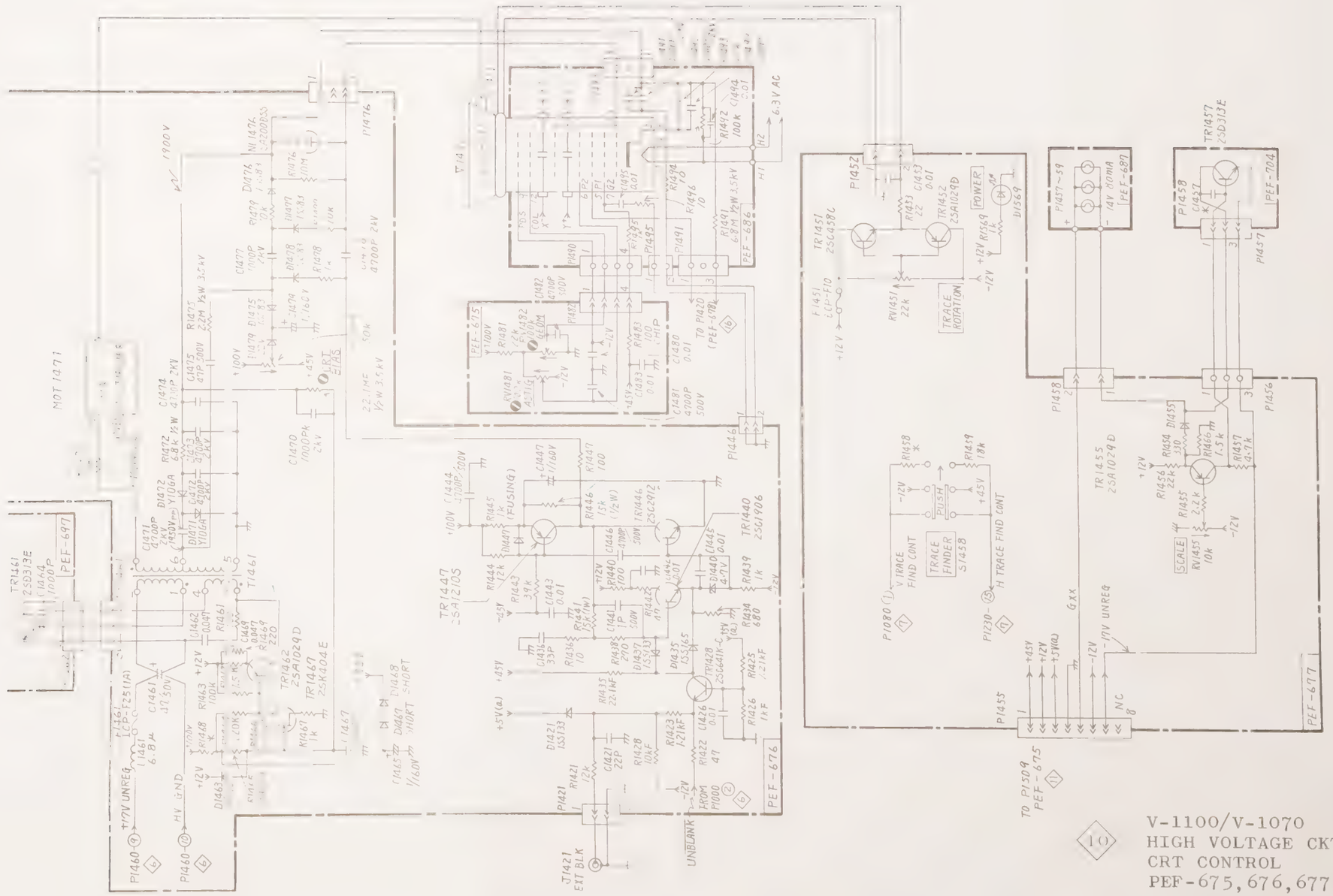
Note:

▭ : V-1100 only.

⑧ V-1100/V-1070
A/B CURRENT SOURCE
PEF-675,702,703



V-1100/V-1070
HORIZONTAL OUTPUT AMP
FOCUS AMP
PEF-675,678


T1461
T1462
T1463
T1464
T1465
T1466
T1467
T1468
T1469
T1470
T1471
T1472
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T1474
T1475
T1476
T1477
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T1488
T1489
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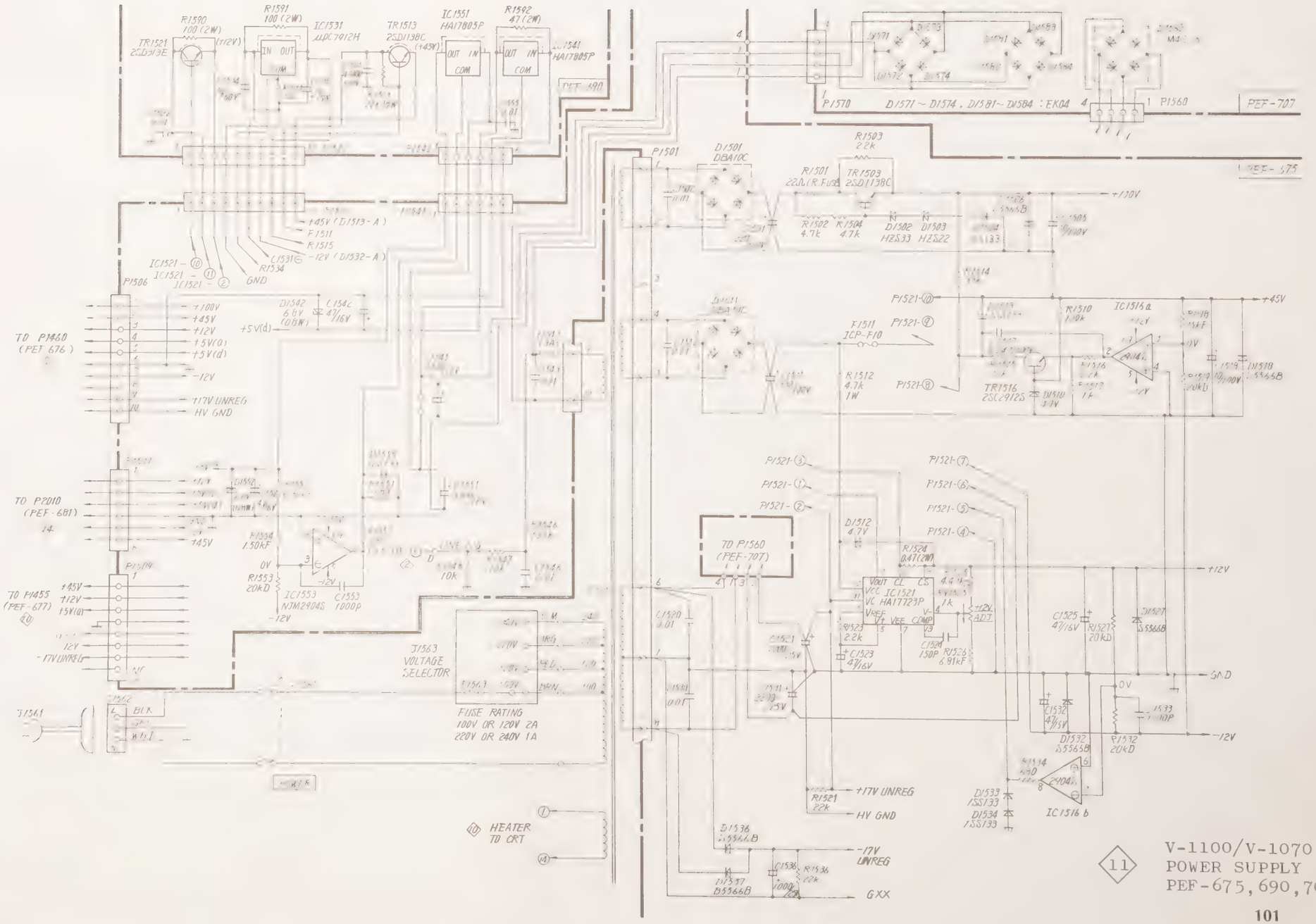
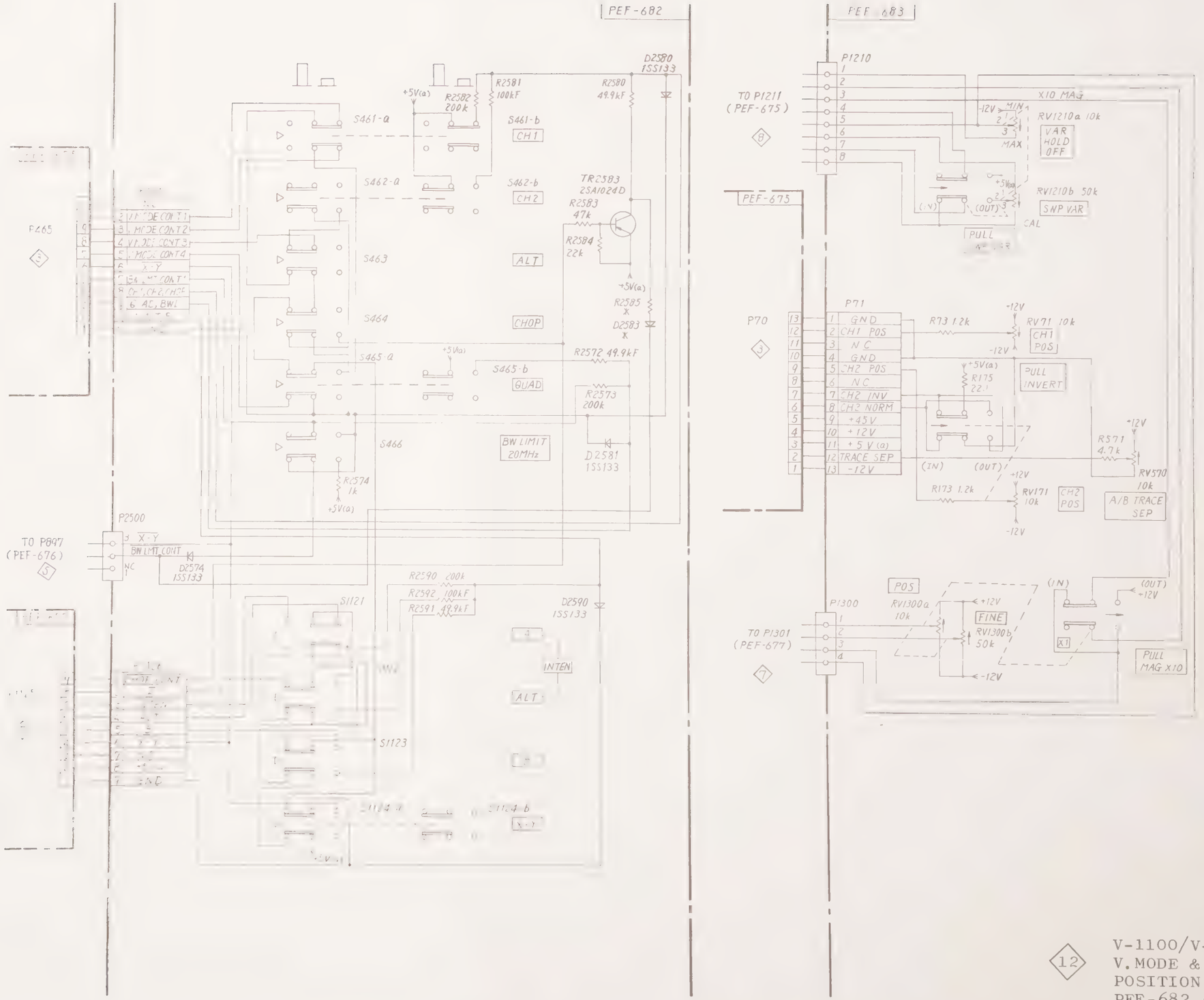
T1499
T1500
T1501

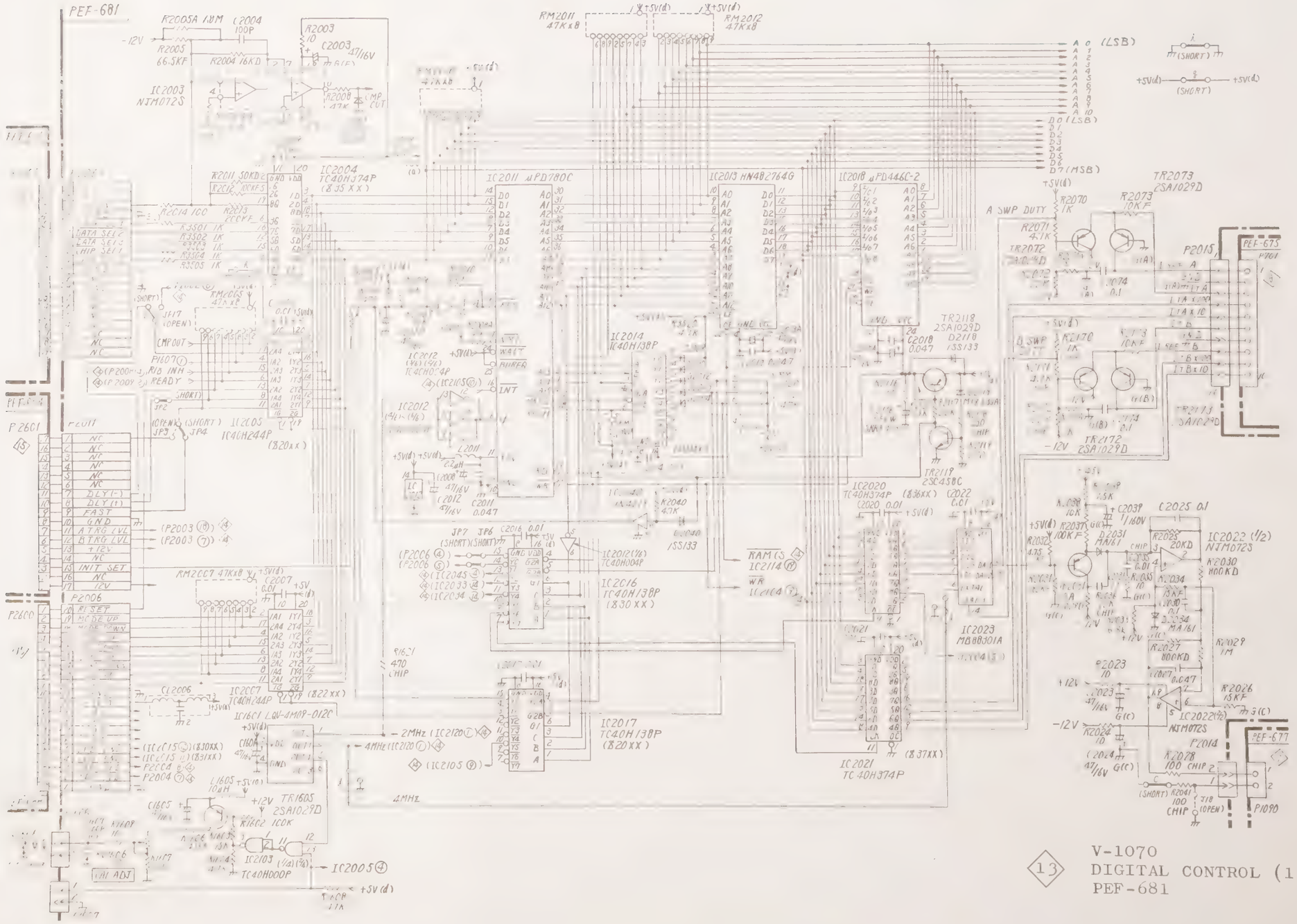


V-1100/V-1070
POWER SUPPLY
PEF-675, 690, 707

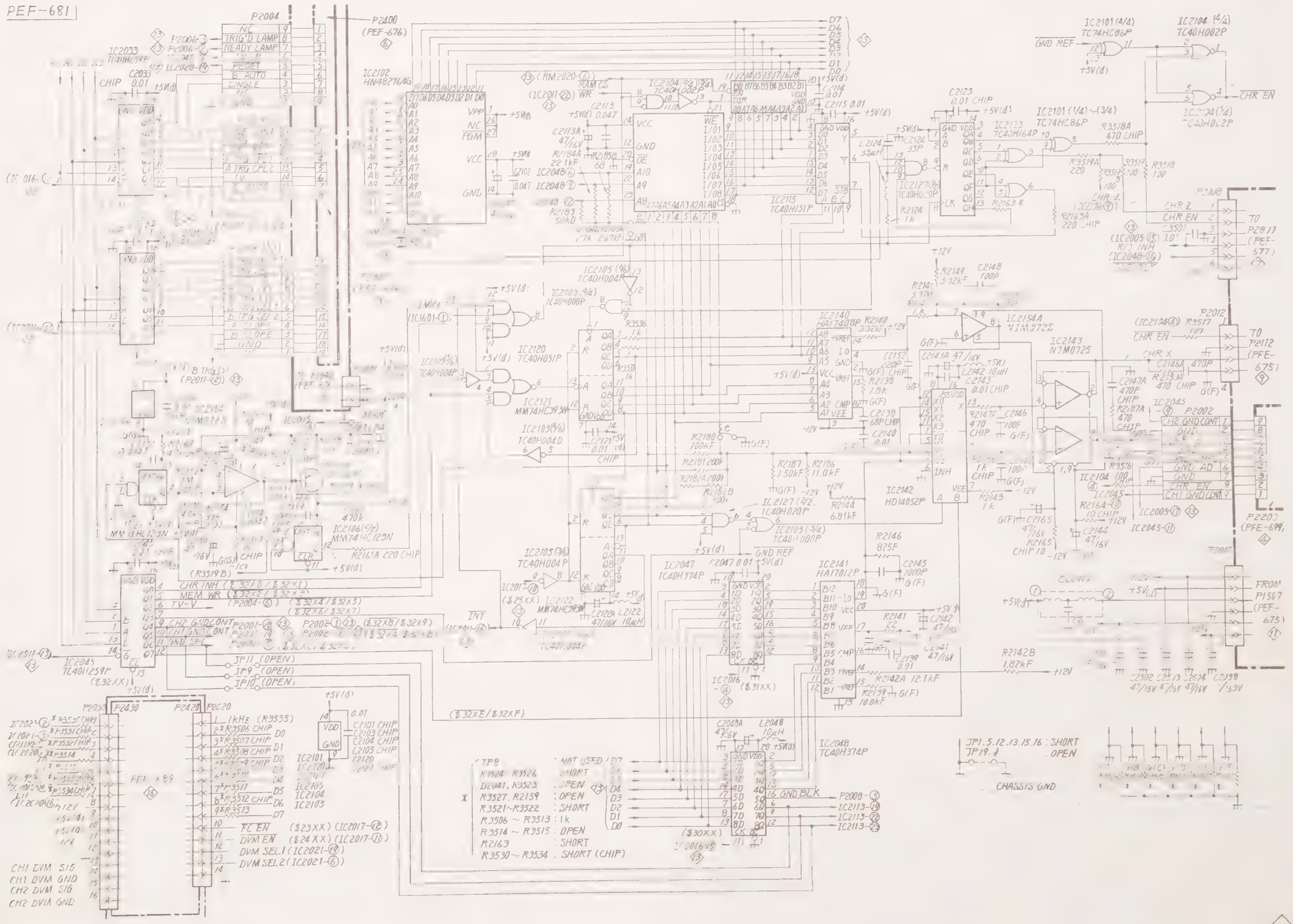
11

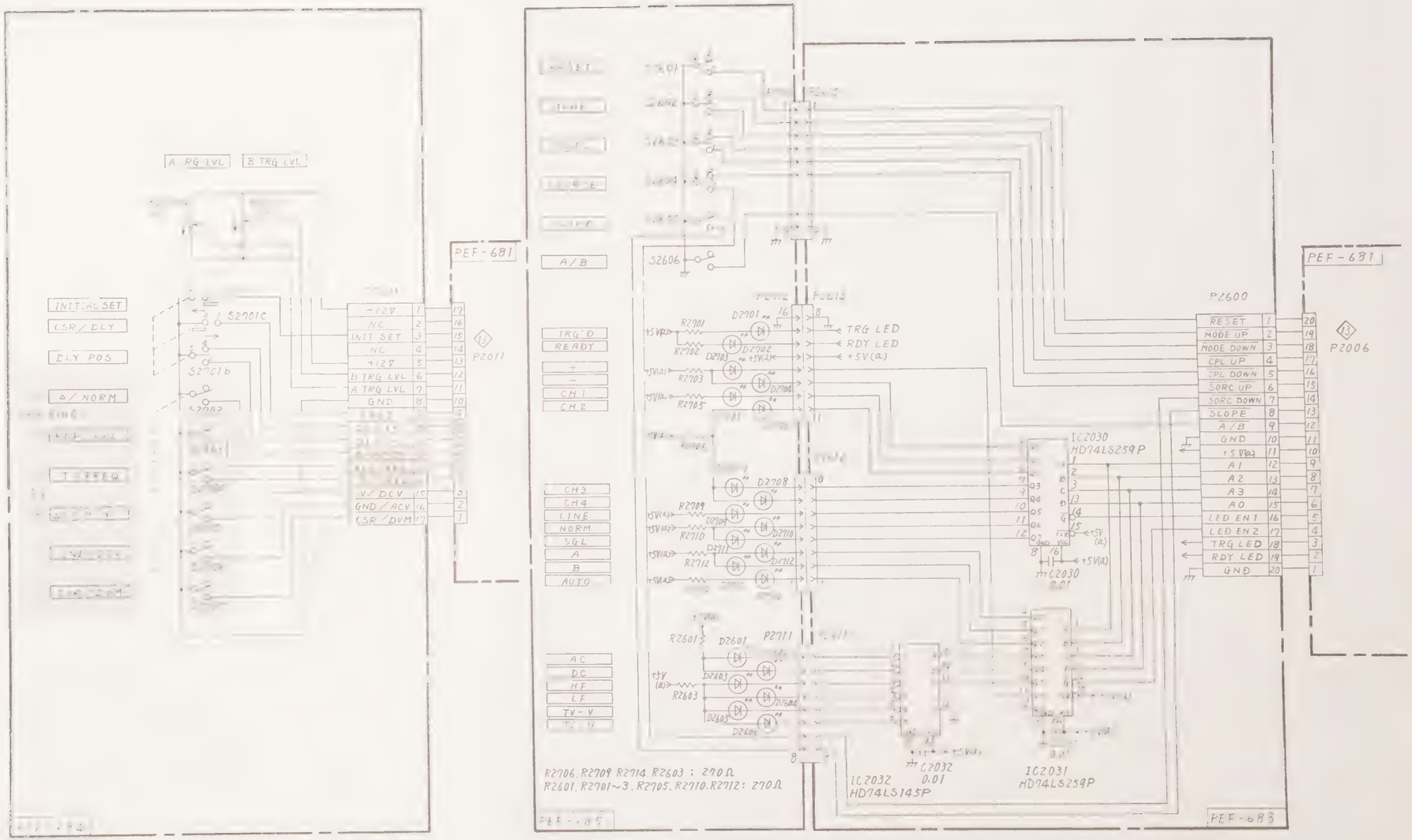


12 V-1100/V-1070
V. MODE & H. MODE
POSITION CONTROL
PEF-682,683



13 V-1070
DIGITAL CONTROL (1)
PEF-681

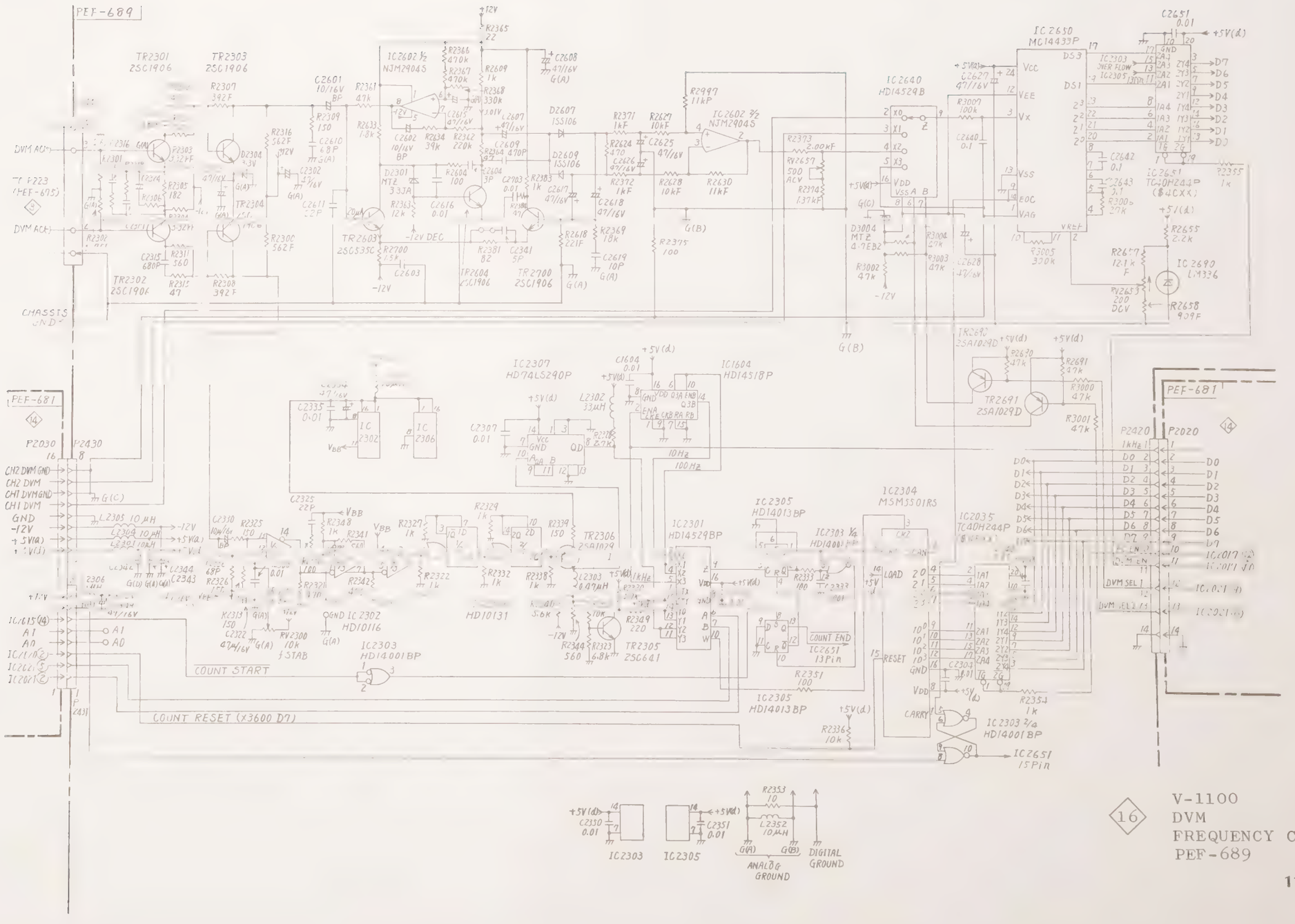

P2004
P2100 (PEF-676)
IC2033 TC40H679P
IC2102 HN48276AG
IC2104 TC40H002P
IC2101 (1/4) TC74HC86P
IC2101 (1/4)~(3/4) TC74HC86P
IC2123 TC40H164P
IC2105 (4/4) TC40H004P
IC2103 (3/4) TC40H4000P
IC2120 TC40H05P
IC2121 MM74HC393N
IC2106 (1/2) MM74HC123N
IC2045 TC40H112P
IC2047 TC40H374P
IC2048 TC40H374P
IC2115 TC40H151P
IC2127 (1/2) TC40H020P
IC2140 HA17402BP
IC2141 HA17012P
IC2142 HD14052P
IC2143 NJM0725
IC2154A NJM0725
IC2045 P2002
P2008
P2012
P2017
P2112 (PEF-675)
P2203 (PEF-699)
P2430
P2420
P2020
P2030
CHR INH (&32X1 / &32X1)
MEM WR (&32X2 / &32X3)
TV-V (P2004-6) (&32X4 / &32X5)
(&32X6 / &32X7)
CH2 GNDCONT P2001-8 P2002-1 (&32XB / &32X9)
CH1 GNDCONT P2001-19 P2002-13
IND SEL P2002-12 (&32XA / &32XC)
JP11 (OPEN)
JP9 (OPEN)
JP10 (OPEN)
(&32XE / &32XF)
TP8 : NOT USED
R3524 R3526 : SHORT
D6U41, R3523 : OPEN
R3527, R2159 : OPEN
R3521~R3522 : SHORT
R3506 ~ R3513 : 1k
R3514 ~ R3515 : OPEN
R2163 : SHORT
R3530 ~ R3534 : SHORT (CHIP)
JP1.5.12.13.15.16 : SHORT
JP19 : OPEN
CHASSIS GND
1kHz (R3535)
FC EN (&23XX) (IC2017-12)
DVM EN (&24XX) (IC2017-11)
DVM SEL1 (IC2021-10)
DVM SEL2 (IC2021-6)
CH1 DVM SIG
CH1 DVM GND
CH2 DVM SIG
CH2 DVM GND
CHR EN
CHR X
CHR Z
TO P2017 (PEF-577)
TO P2112 (PEF-675)
FROM P1567 (PEF-675)
V-1100
DIGITAL CONTROL (2)
PEF-681



Note:

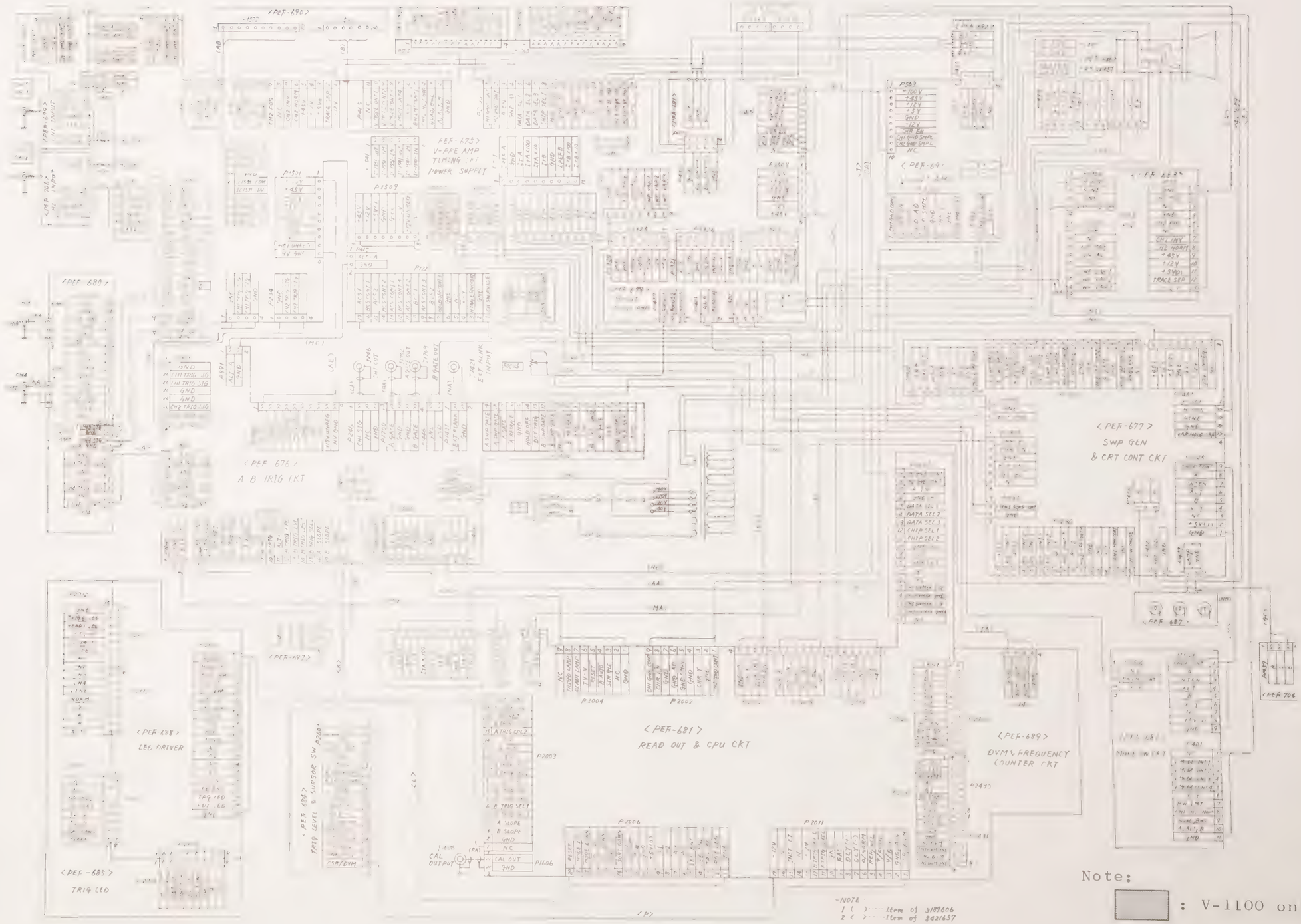
▭ : V-1100 only.

◇15 V-1100/V-1070
DIGITAL CONTROL (3)
PEF-684, 685, 688



V-1100/V-1070

16 V-1100
DVM
FREQUENCY COUNTER
PEF-689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A B TRIG CKT
< PEF-677 >
SWP GEN
& CRT CONT CKT
< PEF-681 >
READ OUT & CPU CKT
< PEF-689 >
DVM & FREQUENCY
COUNTER CKT
< PEF-688 >
LED DRIVER
< PEF-685 >
TRIG LED
< PEF-687 >
< PEF-704 >
< PEF-697 >
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TRIG LEVEL & SLOPE SW P.C.B.
< PEF-691 >
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< PEF-699 >
< PEF-700 >
V-FFE AMP
TIMING PT
POWER SUPPLY
P1501
P1509
P1121
P2003
P2004
P2002
P1606
P2011
P2431
P2501
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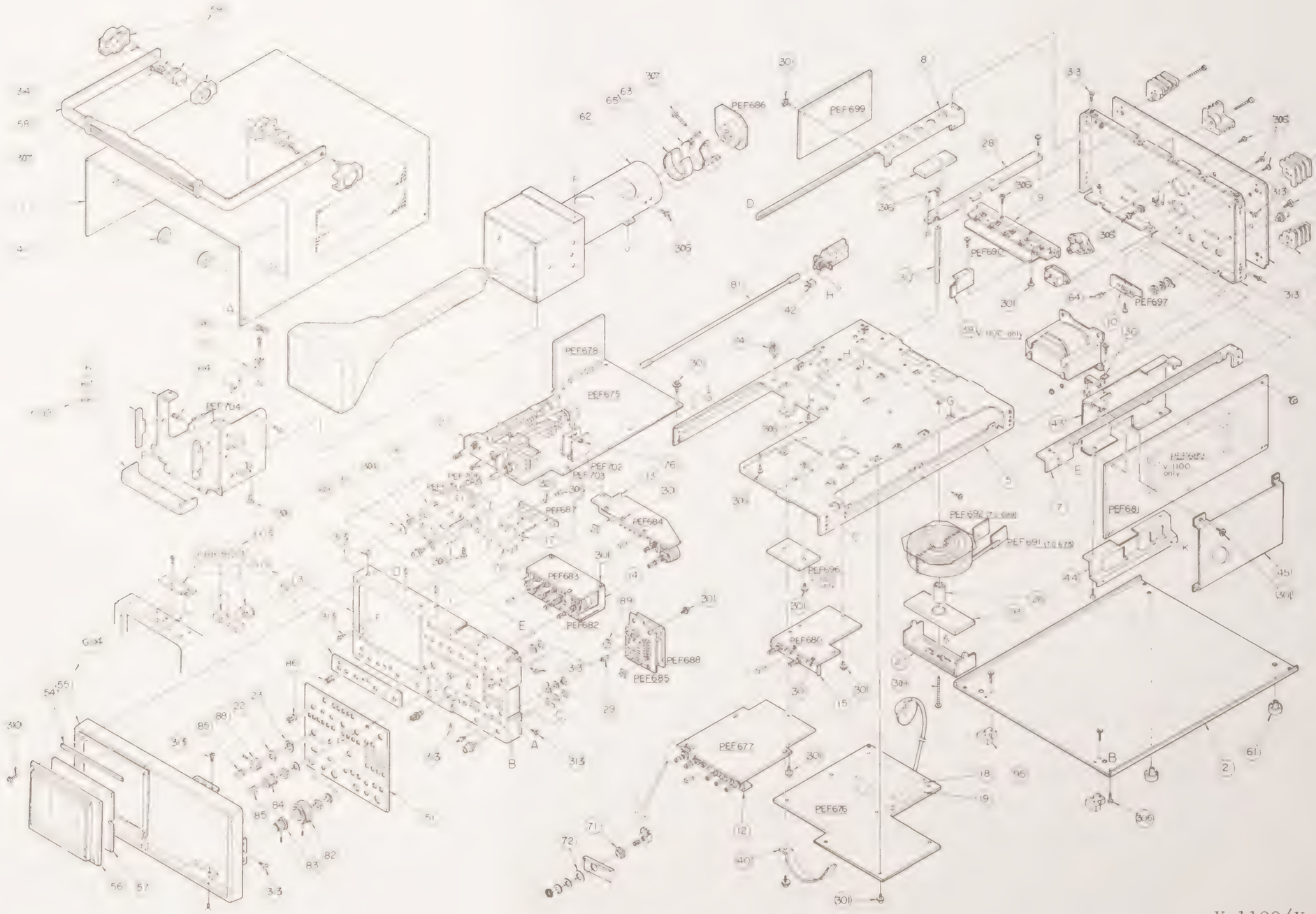
Qty: A:V-1100
B:V-1070

11. MECHANICAL PARTS LIST AND EXPLODED VIEW

Part Code	Symbol	Description	Qty A	Qty B	Remarks
3184004A	1	Cover, up	1	1	
3184005A	2	Cover, bottom	1	1	
8425648A	G01	Chassis Assy, front	1	1	
2108367AA		Chassis, front	1	1	
8412880A		Panel, front (2)	1	1	
2108368AA	4	Chassis, rear	1	1	
121408AA	5	Chassis, P	1	1	
8425650A	G02	Chassis Assy, CRT	1	1	
2108369AA		Chassis, CRT	1	1	
8395443A	66	Rubber	1	1	
8377074B	67	Rubber	2	2	
3184006A	7	Angle, R	1	1	
3184007A	8	Angle, L	1	1	
8414451A	9	Plate, TR (1)	1	1	
8414452A	10	Plate, TR (2)	1	1	
8427092B	G03	Plate Assy, CRT	1	1	
8430658A	11B	Plate, CRT	1	1	
8411969A		Plate, earth	1	1	
8412871A	68	Cushion	1	1	
8411960A	12	Bracket, SW (1	1	1	
3184010A	13	Bracket, SW (	1	1	
3184011A	14	Bracket, SW (	1	1	
8411961A	15	Bracket, SW (4	1	1	
8425637-39A	16	Bracket, SW (5)	1	1	
8430657A	17	Bracket, lamp	1	1	
3184012A	18	Shield case, HV	1	1	
8411967A	19	Shield cover, HV	1	1	
8416256A	21	Bracket, ATT	1	1	
8416257A	22	Nut, ATT	2	2	
8432023A	26	Support, DL	1	1	
8424945A	27	Plate, DL	1	1	
8424846A	28	Plate, PEF678	1	1	
8411970A	29	Support	4	4	
8424948A	30	Support	1	1	
8398477A	31	Spacer, BNC	2	2	
8429054A	36	Support	1	1	
8430650A	37	Bracket	1	1	
8430651A	38	Support	1		V-1100
8432209A	40	Plate, earth	1	1	
8398476A	41	Nut Plate	2	2	
8406477A	42	Stopper	1	1	
3190898AA	43	Plate, shield	1	1	
3190899A	44	Plate, shield	1	1	
3190907A	45	Plate, shield	1	1	
3184015A	51	Panel, front (1)	1		V-1100
3184015B	51	Panel, front (1)		1	V-1070
3184013A	53	Panel, rear	1	1	
8427094A	G04	Frame Assy	1		V-1100
8427094B	G04	Frame Assy		1	V-1070
121405A	55	Frame	1	1	
8412885A	54	Nameplate	1		V-1100
8412885B	54	Nameplate		1	V-1070
288060E	56	Bezel	1	1	
8416245A	57	Filter	1	1	
3185462A	58	Handle	1	1	
8377076A	59	Stopper, handle	2	2	
3149317A	60	Foot, rear	4	4	
3140755A	61	Foot, bottom (rear)	2	2	
2108370A	62	Shield case, CRT	1	1	
8411966A	63	Band, CRT	1	1	
8340163B	64	Rivet	2	2	No.1027
8279758B	65	Rubber	1	1	
8412872A	69	Spacer, SW mask	2	2	
8427096A	70	Guide, lamp	1	1	

Part Code	Symbol	Description	Qty A	Qty B	Remarks
8401613B	71	Insulator (1)	1	1	
8401614B	72	Insulator (2)	1	1	
8383455B	74	Guide, cable	1	1	
4053815E	76	Support, PEF702-3	1	1	
3180083AA	81	Knob		1	PW
3149319A	82	Knob		1	AT
3149320A	83	Knob		1	BT
3149323C	84	Knob		3	URV-H
3149324A	85	Knob		5	S18B
3149324B	86	Knob	11	11	S18B-N
3122681B	88	Knob		2	0016
8383451A	89	Knob	3	3	
8429055B	91	Cushion	1	1	
8432024A	93	Cushion, DL	1	1	
3175129A	95	Foot, bottom (front)	2	2	
	301	Screw, sems	46	46	M3 x 8
	302	Screw, sems	4	4	M4 x 20
	304	Screw	4	4	M2.6 x 5
	306	Screw	41	41	M3 x 8
	307	Screw	3	3	M3 x 16
	308	Screw	4	4	M4 x 12
	309	Screw	1	1	M4 x 50
	310	Screw, black	4	4	M3 x 10
	313	Screw, flat	28	28	M3 x 6
	314	Screw, flat	4	4	M3 x 10
	321	Washer, insulator	3	3	M3



V-1100/V-1070
EXPLODED VIEW

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